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Advantages and Disadvantages of Hop, Skip, Jump Race and Running over Hurdle Games in Physical Education

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ABSTRACT: This study aims to determine the advantages and disadvantages of the hop, skip, jump race, and running over hurdle games in physical education. The method used in this study is a literature review. This method was chosen because it is to produce a new theory on the research topic by conducting a study of previous research results based on theories that can be accounted for. By understanding the advantages and disadvantages of the hop, skip, and jump race and running over hurdle games in physical education on students' physical fitness, physical education teachers can design programs that are more targeted and effective, and more attractive to both male and female students. This is important to create an inclusive learning environment and support the active involvement of all students. Based on the results of the study, it can be concluded that the advantages and disadvantages of the Hop, skip, and jump race and Running Over Hurdle games, both of these games have a significant role in developing children's physical fitness. Hop, skip, and jump race tends to focus more on developing basic motor skills such as coordination, leg muscle strength, and cardiorespiratory endurance. This game is effective for children who need to improve body balance and coordination between eyes and feet. On the other hand, running over hurdle is more effective in improving agility, reaction speed, and skills in controlling body movements when running and jumping over obstacles. Games involving obstacles, such as running over hurdle, tend to have a positive effect on the coordination and reflex abilities needed in many sports activities. However, both hop, skip, jump race and running over hurdle have the potential to develop a healthy competitive attitude in children, because both are usually carried out in the form of a race or competition. This competitive nature, if properly directed, can help students learn about the values of sportsmanship, cooperation, and the importance of hard work.

KEYWORDS: Games, Hop, Skip, Jump Race, Running Over Hurdle, Physical Education

INTRODUCTION

Differences in the influence of game types on the physical fitness of elementary school students by considering gender are still very limited. Improvement of basic motor skills without considering variations in the types of game activities or differences in responses based on gender (Iwandana et al., 2018). This study attempts to fill this gap by exploring the advantages and disadvantages of the hop, skip, jump race and running over hurdle games in physical education, both for boys and girls. This study also attempts to provide new contributions to the development of game-based physical education by considering the needs and individual characteristics of students, so that each child can get optimal benefits from physical activity carried out at school (Iwandana et al., 2021).

The urgency of this study lies in the importance of compiling a more effective, inclusive, and responsive physical education program to the developmental needs of students. Furthermore, the urgency of this study is very high, considering the importance of physical fitness for child development. With the increasing levels of sedentary and obesity among children, there needs to be more effective interventions to encourage their involvement in physical activity. If it is found that one type of game is more effective for a particular gender, these results can be the basis for designing a more adaptive physical education program (Purnomo Shidiq et al., 2022).

This study is expected to provide insight for physical education teachers in determining learning methods that are not only fun, but also beneficial for improving students' physical fitness evenly and fairly. Amid the increasing phenomenon of sedentary behavior in children due to technological advances, the need to encourage fun and beneficial physical activity is becoming increasingly urgent (Tarigan et al., 2023). Given this, it is important to further examine the effect of different types of hop, skip, jump race and running over hurdle games on improving students' physical fitness, considering gender as a moderating variable.

This study is expected to contribute to the world of physical education in Indonesia in designing learning methods that are more effective and responsive to individual differences. In addition, this study is expected to provide practical recommendations for physical education teachers in designing physical exercise programs that are not only varied, but also inclusive, to increase the active participation of all students in elementary schools (Rizky Adi Nugroho, Rima Febrianti, 2022).

Playing has a significant role in human life, which can affect psychological, physical, and social aspects. Through playing, several components of the psychological aspect can develop, such as intelligence, motivation, emotion, mental stability, self-confidence, interest, willingness, anxiety, aggressiveness, attention, and concentration (Utama, 2011). In addition, playing can also be used as a means of stimulating children's activities, so that it can improve children's physical fitness (Astini, 2017). Some game models that can be used to improve physical fitness include hop, skip, and jump race and running over hurdle. Hop, skip, and jump race is a series of short and fast jumping movements. Hop, skip, and jump race has benefits in encouraging children to increase the need for high-intensity physical activity in improving children's physical fitness (Driediger et al., 2018). Daily physical activity participation is very important for children's health and well-being. Along with the child's total daily physical activity.

Running over hurdle is a game that is done by sprinting by jumping over obstacles in the form of hurdles until reaching the predetermined finish line. Running over hurdle has benefits in improving children's physical fitness. This is in line with the results of research conducted by Aloui et al. (2021) reported that plyometrics and sprint programs, such as running over hurdles carried out for 8 weeks significantly increased strength, speed, balance, and anaerobic endurance in children. Research conducted by Li et al. (2023) reported that physical education interventions based on functional physical training, such as running over hurdles, can effectively promote several parameters of students' physical fitness, while providing new and alternative ideas for improving students' physical fitness in physical education.

By understanding the advantages and disadvantages of the hop, skip, jump race and running over hurdle games in physical education on students' physical fitness, physical education teachers can design programs that are more targeted and effective, and more attractive to both male and female students. This is important to create an inclusive learning environment and support the active involvement of all students.

RESEARCH METHODS

The method used in this research is literature review research. This method was chosen because it aims to produce a new theory regarding the research topic by reviewing the results of previous research based on a theory that can be accounted for.

Literature review research is carried out to produce new, more up-to-date understanding, thoughts or theories regarding a problem being researched through reviewing the results of previous studies or research based on theories that can be accounted for, so it is not an assumption, argument or idea from the researcher. The purpose of a literature review is to provide an explanation of the reader's choices and reasoning by comparing the strongest research results with other studies (Harris, 2019). This research was conducted by reviewing articles related to the importance of physical literacy in children's physical education. Selecting the population as a sample used inclusion and exclusion criteria and applying Preferred Reporting Items for Systematic Reviews and Meta Analyzes (PRISMA). Inclusion criteria are that the articles reviewed are research articles on physical literacy in children's physical education. Data collection was carried out using primary data sources in the form of similar articles with research titles that have been published. Data from similar research is processed through analysis and interpretation to produce conclusions as a new theory.

RESULTS AND DISCUSSION

- A. Advantages and disadvantages of the hop, skip, and jump race game in physical education:
- 1. Advantages of the Hop, skip, and jump race game
- a. Increase muscle strength and body balance

The Hop, skip, and jump race game involves jumping and running movements that are effective in increasing leg muscle strength and body balance. According to Lubans et al. (2010), physical activities that involve jumping movements can help strengthen leg muscles and improve balance, which are important in the process of children's physical development. Jumping movements require stability and coordination, which in turn strengthen core muscles and increase endurance. In a recent study, Pitetti and Bone (2018) stated that jumping and stepping repeatedly can help build better bone density, especially during children's growth, thereby reducing the risk of osteoporosis in adulthood.

b. Improve Coordination and Motor Skills

This game also plays an important role in honing children's motor coordination skills, especially coordination between the eyes and feet. Gallahue and Donnelly (2003) emphasized that basic motor skills, such as stepping and jumping, involve coordination

between various muscle groups, which is very important in the development of fine and gross motor skills. This game also involves speed and accuracy, which helps students develop reflexes and the ability to respond quickly to various situations.

c. Improve Cardiorespiratory Fitness

As an intense physical activity, Hop, skip, and jump race also improves cardiorespiratory fitness in children. Repetitive running movements require an increase in heart rate, which is good for heart and lung health. According to Tomporowski et al. (2008), high-intensity physical activity can increase children's cardiorespiratory capacity and endurance, which are important in maintaining body health and preventing metabolic diseases such as obesity. Research conducted by Hopkins et al. (2019) also found that activities such as jumping and running regularly help increase children's basal metabolism, which contributes to healthy weight management.

B. Develop a Healthy Competitive Attitude

The Hop, skip, and jump race game is usually carried out in the form of a competition, where children race to reach the finish line. This can develop a healthy competitive attitude in children, which is important in character building. Morgan and Hansen (2008) noted that through competitive activities, students learn to appreciate the results of effort and accept defeat with sportsmanship. This is in line with the goals of physical education which not only focus on the physical aspect, but also the development of social and emotional values.

- 2. Disadvantages of Hop, Skip, and Jump Race Games
- a. Potential for Injury to the Feet and Joints

The Hop, Skip, and Jump Race game has a risk of injury, especially to the feet and joints, if not properly supervised. According to Pangrazi and Beighle (2010), activities that involve jumping and running are at risk of causing muscle or joint injuries if done without adequate warm-up or if the child does not have adequate basic skills. Ankle or knee injuries often occur in children who lack coordination or have balance disorders.

b. Challenges for Children with Physical Disabilities

This game may be less suitable for children with physical limitations or certain health conditions. Intense activities such as jumping and running can cause excessive fatigue in children with limited physical conditions, or even cause discomfort for them. Bailey (2006) suggests that physical games need to be adjusted to be inclusive of all students, including those with physical disabilities. In some cases, game adaptations may be needed so that children with special needs can participate.

c. Requires Close Supervision to Reduce the Risk of Injury

Without proper supervision, this game has the potential to pose a risk of injury due to its competitive and intense nature. Aloui et al. (2021) stated that teachers need to closely monitor any activities that involve intense movements such as jumping or running to ensure the safety of children. In addition, the use of uneven surfaces or inadequate fields can also increase the risk of injury during the game.

The Hop, skip, and jump race game each has advantages and disadvantages in the context of elementary school physical education. Both games are very effective in developing children's basic motor skills, muscle strength, and cardiorespiratory fitness. However, there is a risk of injury and limitations in accessibility, especially for children with special needs or certain physical limitations (Syahputra et al., 2017). Therefore, proper adaptation and supervision are essential in implementing these two games to ensure that all students can participate safely and get optimal benefits from this activity. To achieve the overall goal of physical education, it is important for teachers to consider various aspects related to safety, inclusive participation, and adapting the game according to student abilities. With the right adaptations, the Hop, Skip, and Jump race can be a fun and effective learning tool to improve the health and physical fitness of elementary school students, while building positive social skills and character in them.

c. Advantages and disadvantages of the Running Over Hurdle game in physical education:

- 1. Advantages of the Running Over Hurdle Game
- a. Trains Agility and Reaction Speed

The Running Over Hurdle game is very effective in training children's agility and reaction speed. The movement of jumping over obstacles requires the ability to adjust steps and maintain body balance while moving quickly. Lubans et al. (2010) stated that physical activities involving agility and changes in direction can help children improve reflexes and responses to environmental stimuli. This is very useful in improving fine and gross motor skills, which are important for long-term physical development.

Increases Leg Muscle Strength and Stability

Jumping over obstacles repeatedly involves the use of leg muscles and core muscles to maintain body stability. In a study conducted by Pitetti and Bone (2018), the activity of jumping over obstacles showed a significant increase in leg muscle strength and child postural stability. This movement of jumping over obstacles not only strengthens leg muscles, but also helps improve posture, especially in children who are still growing.

c. Encourages Healthy Cooperation and Competition

This game is usually played in groups, so that children learn to work together in a team and feel the benefits of healthy competition. According to Morgan and Hansen (2008), physical games played in teams help children develop social skills such as communication and group coordination. In addition, children also learn the importance of team support and cooperation to achieve common goals, which are important values in the formation of social character.

d. Developing Cognitive Abilities through Quick Decision Making

The Running Over Hurdle game requires children to make quick decisions when facing obstacles. Hopkins et al. (2009) noted that games that require quick decision making can improve critical thinking skills and problem-solving abilities. Children are invited to think about the best way to jump over obstacles without falling, thus training their ability to strategize and consider risks.

- 2. Disadvantages of the Running Over Hurdle Game
- a. Risk of Injury from Obstacles

One of the main disadvantages of this game is the risk of injury if the obstacles are not set up safely. Aloui et al. (2021) emphasize the importance of using obstacles that can be knocked down or dropped safely to reduce the risk of injury to children. Obstacles that are too hard or too high can cause accidents, especially if the child loses balance or is unable to jump over the obstacles properly.

b. Challenges for Children with Motor or Mobility Limitations

The Running Over Hurdle game requires agility and leg strength, which can be a challenge for children with motor or mobility limitations. According to Pangrazi and Beighle (2010), children who have motor disorders or physical limitations may find it difficult or even vulnerable to injury when they have to run and jump over obstacles. In the context of inclusive physical education, this game needs to be adapted so that it can be followed by all students. Modifications that can be applied, for example, are using lower obstacles or providing extra time for children who need adjustments.

c. Requires Close Supervision

Like the Hop, skip, and jump race, the Running Over Hurdle game also requires close supervision from teachers or coaches to ensure the safety of children. Hopkins et al. (2009) noted that without proper supervision, children may try to jump over obstacles in an unsafe manner, potentially causing injury. Therefore, it is important for teachers to monitor each participant and provide clear instructions on how to jump over obstacles safely. In addition, it is necessary to ensure that all children run in the same direction to avoid collisions when jumping over obstacles.

d. Limitations in Facilities and Equipment

The Running Over Hurdle game requires special equipment such as height-adjustable obstacles, as well as sufficient space to run. In some schools, limited facilities or sports equipment can be a barrier to implementing this game optimally. According to Gabbard (2008), limited facilities such as inadequate fields or equipment can affect the quality and safety of the implementation of this game. This also has an impact on student involvement who may be less enthusiastic if the game cannot be run properly.

e. Causes a Sense of Lack of Confidence in Less Proficient Children

For some children, especially those with underdeveloped motor skills, the Running Over Hurdle game can be a source of anxiety or insecurity. According to Bailey (2006), children who feel left behind or less capable than their peers tend to have low motivation to participate in physical activities. In this game, children who often fail to jump over the hurdles may feel intimidated, thus reducing their motivation to actively participate in physical activities. To overcome this problem, teachers can provide positive reinforcement and adjust the height of the hurdles according to each child's ability.

CONCLUSION

Based on the results of the study, it can be concluded that the advantages and disadvantages of the hop, skip, jump race and running over hurdle games, both of these games have a significant role in developing children's physical fitness. Hop, skip, and jump race tends to focus more on developing basic motor skills such as coordination, leg muscle strength, and cardiorespiratory endurance. This game is effective for children who need to improve body balance and coordination between the eyes and feet. On the other hand, running over hurdle is more effective in improving agility, reaction speed, and skills in controlling body movements when running and jumping over obstacles. Games that involve obstacles, such as running over hurdle, tend to have a positive effect on the coordination and reflex abilities needed in many sports activities. However, both Hop, skip, jump race and running over hurdle have the potential to develop a healthy competitive attitude in children, because both are usually carried out in the form of races or competitions. This competitive nature, if properly directed, can help students learn about the values of sportsmanship, cooperation, and the importance of hard work.

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