The Important Role of Traditional Games in Enhancing Children’s Gross Motor: Literature Review

Aisyah Nur Affah Maulidiyyah¹, Budi Purwoko²
¹Universitas Negeri Surabaya
¹daisyah28nur@gmail.com

Abstract: Gross motor development involves body movements that engage large muscles, such as sitting, walking, and running. Participation in motor activities is crucial for a child's development. Through active physical activities, children can enhance their gross motor skills. One approach to developing these skills is through traditional games. However, with the advancement of science and technology, children tend to be more interested in and easily access gadget games rather than traditional games. This shift has led to a lack of social interaction among children and limitations in the development of gross motor skills. Recognizing this phenomenon, researchers conducted a literature review to identify the important role of traditional games in improving children's gross motor skills. This study employed a literature review or literature survey method, utilizing supplementary data from previous research with a similar topic. Data collection was conducted using the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) method. The findings of the literature review concluded that traditional games can provide a solution for enhancing the development of children's gross motor skills.

Keywords: Gross Motor, Traditional Games, Children

INTRODUCTION

Playing is an activity that is strongly associated with the world of children. Playing is inherently natural for a child. The purpose of play for children is to enhance development in various aspects, such as motor skills, cognitive abilities, language, creativity, and emotional or social skills. However, with the advancement of Science and Technology, children tend to engage...
in technology-oriented games that no longer support physical activity, but rather lean towards online gaming (Anggita, 2019).

Results from previous research through prevalence studies conducted in Indonesia (Menado, Pontianak, and Yogyakarta) in 2012 found that approximately 150 students (10.2%) out of 1477 students (907 students at the junior high school level and 570 at the senior high school level) experienced addiction to online games. Statistical analysis revealed that 89 (59.3%) out of the 150 addicted students fell into the severe addiction category, while the remaining were classified as having mild addiction (Jap et al., 2013). According to market research agency Newzoo, based in Amsterdam, in 2017, there were 43.7 million gamers (56% of them male) in Indonesia, who collectively spent a total of US$880 million on online games. The highest number of gamers in Southeast Asia played games on smartphones, personal computers, and laptops. Moreover, as of January 2022, Indonesia ranked third in terms of the highest number of gamers worldwide, following the Philippines and Thailand, with a prevalence rate of 94.5% of internet users aged 16-64 playing video games (Newzoo, 2022).

Excessive consumption of online games can lead to dependency in children. Furthermore, online games have negative effects on children, such as hindering their studying habits, causing them to lose track of time, using leisure and study time for playing online games, and even spending their pocket money and school fees on online gaming. It also disrupts their eating patterns, religious activities, and physical exercise, while negatively impacting children's emotional development (IKBAL et al., 2021). A study by Giri & Dharmadi (2013) reported that 83.5% of 71 respondents who had a habit of playing video games experienced a decrease in visual acuity in one or both eyes. This is particularly concerning given the high prevalence of eye refractive disorders among online gamers, which was found to be 51.1% for PC gamers, 45.6% for console gamers, and 3.3% for gadget gamers. Additionally, Ulfa's research in 2017 stated that 52% of gamers experienced health problems such as fatigue, 30% experienced headaches, 15% felt weak, and 5% experienced nausea as a result of online gaming addiction. Furthermore, Wulandari's research in 2017 explained the dangers of obesity due to a lack of physical activity from prolonged sitting or lying down and laziness at home (Giri & Dharmadi, 2013). From previous research data, gap data in the research was obtained which is presented in the following table.

<table>
<thead>
<tr>
<th>No.</th>
<th>Previous Research Themes</th>
<th>Conclusion of Previous Research Findings</th>
<th>Research Gaps</th>
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<tr>
<td>1</td>
<td>Prevalence of Online Game Addiction in Indonesia</td>
<td>The prevalence of online game addiction reached 10.2% among students in several cities in 2012.</td>
<td>It is necessary to update data on the prevalence of online game addiction among students and compare it with 2012.</td>
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<tr>
<td>2</td>
<td>Profile of Gamers in Indonesia in 2017</td>
<td>In 2017, there were 43.7 million gamers in Indonesia, with 56% of them being men.</td>
<td>It is necessary to update the latest data on gamer profiles, as well as involving social factors such as gender and age.</td>
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<tr>
<td>3</td>
<td>Negative Impact of Online Games on Children</td>
<td>Online games can have a negative impact on children, such as inhibiting study habits, losing track of time, and so on.</td>
<td>Further research is needed to explore this, including the factors that influence this impact on children.</td>
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Considering the various data on the impacts observed, the importance of this research topic focuses on the role of parents and teachers in redirecting children's focus and attention by engaging them in positive activities, such as physical activities. Physical activities play a significant role in developing essential skills for cognitive development by encouraging children to increase their frequency of movement. Motor skills are necessary for a child's development, and they involve a series of intentional, automated, and rapid body movements, which require coordination of complex muscle groups. Based on muscle size and body parts, motor skills are divided into fine motor skills and gross motor skills (Adek Diah Saputri et al., 2021). Gross motor skills involve the use of larger muscles, such as walking, running, jumping, and so on.

Motor learning can be defined as a learning process that focuses on the dimension of movement (Hasbi & Sukoco, 2014). In Regulation No. 137 by the Ministry of Education and Culture of the Republic of Indonesia, it states that lesson planning should be carried out using approaches and teaching models that are appropriate for the needs, characteristics of the child, and local culture. Traditional games are a form of play and physical activity that has evolved from the routines of specific communities. Traditional games are often characterized by their distinct regional characteristics and are deeply rooted in the local cultural traditions. Traditional games are part of the culture of each ethnic group and existed before the emergence of modern games (Anam et al., 2017).

Traditional games represent the unique sports of Indonesian society with various cultural characteristics. The origin and creators of these traditional games are not clearly known. However, traditional games have been enjoyed by people since ancient times, whether for pleasure or as a form of social interaction among the community, fostering a sense of camaraderie, as traditional games are generally played together with the local community. Traditional games have distinct characteristics that are associated with customary practices within specific communities. These games also have educational values as they bring joy, happiness, and cheerfulness to children who play them. According to Gumantan and Mahfud (as cited in Agung Alaska and Abdul Aziz Hakim, 2021), the implementation of traditional sports activities in schools by physical education teachers provides comprehensive benefits insupporting the overall growth and development of children, including improving their motor skills (Alaska & Hakim, 2021). Considering the importance of gross motor skills in a child's development, educators need to implement engaging and creative learning activities to train children's gross motor skills in alignment with the curriculum. Engaging learning activities will create an enjoyable and comfortable learning environment.
Given the shared challenges in the field of education, the researcher is interested in conducting a literature review on the important role of traditional games in enhancing children's gross motor skills. This literature review aims to highlight the benefits of traditional games in children's motor development and promote the rich cultural heritage of the archipelago through traditional games. Research entitled “The Important Role of Traditional Games in Enhancing Children's Gross Motor: Literature Review” can provide significant contributions at various levels, both academic and practical. The following are some of the contributions that researchers can make through this research: (1) Enriching Academic Understanding: Presenting a comprehensive literature review on the role of traditional games in children's gross motor development, Identifying important findings from previous research to enrich academic understanding in this field, (2) Providing a Strong Research Base: Providing a solid research base for further research in the field of children's gross motor development, Presenting the latest information and analysis that can form the basis for further empirical studies, (3) Encouraging Comparative Studies Traditional vs. Traditional Modern: Encourages further research comparing the effects of traditional games with modern games on children's gross motor development, Provides a basis for understanding whether traditional games are more effective in improving gross motor skills than modern games, (4) Providing Practical Instructions for Educators and Parents: Presenting practical recommendations for the application of traditional games in children's education, Providing guidance to educators and parents on how to optimize the use of traditional games in improving children's gross motor skills, (5) Promoting Cultural Preservation: Highlighting the role of traditional games in preserving cultural heritage, Encouraging understanding and appreciation of traditional values that can be integrated into children's lives through games, (6) Making the Community Aware of the Importance of Physical Activity: Emphasizing the importance of physical activity in children's development -children, Provide scientific support to policies and programs that encourage children's involvement in physical play, (7) Potentially Reduces the Negative Impact of Technology: Provides a positive alternative to modern video games that may have a negative impact on children's development, Stimulates thinking about reducing the time spent by children in front of screens and motivates them to participate in physical play.

Through these contributions, this research can be an important source of information for academics, educational practitioners, parents and policy makers in supporting children's gross motor development by utilizing traditional games.

The method used in this study is a literature review. Literature review is a research design that involves collecting data sources related to a specific topic. The aim of a literature review is to describe the main content based on the information obtained (Syofian & Gazali, 2021). The types and sources of data used in this research are articles and additional data from previous studies. This research is focused on creating a new product to solve the problems addressed in the study.

The data collection technique for the literature review involves using a database search tool to search for literature sources. The data collection process begins by using keywords such as "traditional games" and "gross motor skills" on Google Scholar. A total of 65 literature sources were obtained as articles. These articles were then screened using skimming, which involves reading the core of the journal to focus on the topic, check the relevance of the content, and assess the suitability of the sources based on the abstract, keywords, introduction, and conclusion. In the end, 15 articles were selected to be used in this literature review.
RESULT AND DISCUSSION

Result
The research results are presented in the following explanation which contains the results of the analysis of the literature review covering Name of Author, Research Design and Research Results. The following explanation shows the results of the analysis of the literature review. (1) The first research was conducted by Made Ayu Anggraeni, Yunus Karyanto dan Wadiatu Khairati A.S using method Quantitative Research and Research Results The research findings indicate that all aspects of gross motor skills (such as running, one-legged jumping, and two-legged jumping) showed significant improvement in the post-test compared to the pre-test, with a significance level of 0.000 (p < 0.05). This implies that there is a significant difference in all aspects of gross motor skills (jumping) before and after the implementation of role-play playcenter (Anggraini et al., 2018).

(2) The second is research conducted by Siti Restu Utami Fatmawati using method Action Research and research results is The research results demonstrate an improvement in gross motor skills in children of group B1. The initial condition before the intervention showed an average percentage of 28%. In the first cycle, the children's gross motor skills increased to 47%, indicating an improvement of 19% compared to before the intervention. Furthermore, in the second cycle, there was a significant increase in the children's gross motor skills, reaching 67%. It is evident that there was a 20% improvement from the first cycle to the second cycle (Fatmawati, 2019).

(3) The third is research conducted by Anung Probo Ismoko using method Experimental Research and research results The research findings indicate the influence of the traditional game of "bentengan" on the psychomotor development of fifth-grade students at Ngalian Public Elementary School III. While playing "bentengan," children unconsciously perform new movements that train both their gross and fine motor skills. The average score of the pre-test for "bentengan" was 14.43, whereas the average score of the post-test was 18.14 (Pratiwi & Cahyono, 2020).

(4) The four studies conducted by Muhammad Riyan Hidayatullah Hasbi using method Development Research (education research and development R&D) and research results is The aim of this research was to develop a learning model using a modified traditional game approach for lower-grade elementary school children. It can be concluded that the motor learning model using a modified traditional game approach for lower-grade elementary school children is considered good and effective, with positive responses from the participants towards the modified traditional game model. Therefore, this learning model is deemed capable of developing and improving the gross motor skills of lower-grade elementary school children (Hidayatullah & Hasbi, 2021).

(5) The five studies conducted by Dian Puspita Sari, Sri Saprahayuningsih and Wembrayarli using method Classroom Action Research ans research findings is Theoretically, this research demonstrates that traditional games are capable of developing children's physical skills and
exploring their environment without the assistance of others. One of the ways to foster the development of children’s gross motor skills is by stimulating their development through the utilization of educational traditional games (Hakiki & Khotimah, 2020).

(7) The Seven studies conducted by Kamaludin, Ngadiman, Rifqi Festiawan, Indra Jati Kusuma and Ayu Rizki Febriani using by Development Research (education research and development (R & D) and research findings is This study aims to design a product called "Pecah Piring Sintren" (PPS). Through the stages of validation and small-scale product testing, it can be concluded that the overall final product of the PPS game is 91.2%, categorized as “Excellent.” Therefore, the Pecah Piring Sintren (PPS) game is deemed highly suitable for use and has the potential to develop the gross motor skills of children aged 9-12 years (Festiawan et al., 2020).

(8) The eight studies conducted by Yohanes Muga, Nikodemus Bate, and Yanuarius Ricardus Natal using method Development Research (education research and development (R & D) and research findings is In this study, a gross motor learning model was successfully developed through traditional games of "he'abheka" and puzzles. This learning model is considered "appropriate/valid/feasible" as an alternative approach for students in Physical Education, Sports, and Health (PJOK) subject.

(9) The nine studies conducted by Adek Diah Saputri, Dian Eka Priyanto and Uswatun using method classroom action research and research findings is Traditional game "gobak sodor" is a game that promotes the development of gross motor skills in children, including body coordination, balance maintenance, jumping, and agility. When playing the game, children are required to run past the guarding opponents without being touched in order to win the game and reach the finish line. In other words, utilizing traditional games in developing gross motor skills significantly contributes to the development of early childhood's gross motor skills (Adek Diah Saputri et al., 2021).

(10) The ten studies conducted by Aushafil Karimah and Siti Nur Aini Menia using method classroom action research and research findings is The research findings indicate that the game "gobak sodor" can be used as a learning method to stimulate the development of gross motor skills in children. The study also shows an improvement in the aspect of gross motor skill development through playing "gobak sodor". In the pre-cycle, the percentage of children who achieved the learning target was 39%, with an average indicator score of 4.4. After the first cycle the percentage of children who reached the Learning Mastery (KB) target increased to 61%, with an average indicator score of 5.2. In the second cycle, there was a significant improvement in gross motor skill development, with 83% of the total number of children achieving the target, and an average indicator score of 5.9 (Iswantiningtyas & Wijaya, 2015).

(11) The eleven studies conducted by Nurul Sinta Fauziah, Taopik Rahman dan Heri Yusuf Mushlihin using method case study research and research findings is The research findings indicate that engaging in the traditional game of jump rope with rubber band can stimulate the development of gross motor skills in young children. This game trains various aspects of gross motor skills in children, including strength, agility, and balance. By incorporating the traditional game of jump rope with rubber bands, we can actively train, encourage, and enhance the development of gross motor skills in children.

(12) The twelve studies conducted by Muhammad Muhajirin and Yunita Andriana using method classroom action research and research findings is Based on the research findings from two cycles, there was an increase in the percentage of classical mastery from 18.2% in the pre-cycle to 45.5% in cycle I, and further increased to 63.7% in cycle II. Therefore, this study demonstrates an improvement in gross motor skills in children through the game of hide and seek.

(13) The thirteen studies conducted by Dede Nurul Qomariah and Siti Hamidah using method descriptive research method with a qualitative approach and research findings is The research
findings indicate that the game of "engklek" has benefits in improving motor skills in children from Group B of TI TK Armawiyah 1, including training children's balance, strengthening their physical strength, demonstrating their movement speed, enhancing their agility, improving their problem-solving abilities, and sharpening their body flexibility and muscle strength (Qomariah & Hamidah, 2022).

(14) The fourteenth research conducted by Rindawati, Devi Wahyu Ertanti and Ika Anggraheni using method qualitative research with a case study approach and research findings is The research findings demonstrate that the traditional game of jump rope is highly effective in improving the abilities of early childhood learners in terms of gross motor development. Furthermore, other aspects of development such as cognitive skills, language proficiency, moral and religious values, as well as social-emotional well-being, can also be nurtured through engaging in the traditional jump rope game.

(15) and the fifteenth research conducted by Erna Roostin, Wulanda Aditya Azisdan Nida Wahdatul Fuadah using method classroom research and research findings is The research findings indicate that in Cycle I, children achieved an average score of 2.5, which falls under the category of meeting developmental expectations (MDE) with a percentage of 58.3% falling under the category of meeting developmental expectations (MDE). Subsequently, in Cycle II, there was an improvement, and the target was achieved with an average score of 3.8, categorizing it as highly developed (HD) with a percentage of 91.6% classified as highly developed (HD) (Roostin et al., 2022).

Discussion

In this discussion, we will explain how traditional games can enhance children's gross motor skills. Traditional games are highly appealing to children because they can be played using easily available tools and materials in their surroundings. Through play activities, children can engage their whole bodies, helping them stay healthy and happy (Fatmawati, 2019).

A classroom action research conducted by Dian Puspita Sari et al. using the traditional game of hide-and-seek (petak umpet) showed a 60% improvement in the gross motor skills of students from Cycle I to Cycle II. This indicates that the traditional game of hide-and-seek can enhance children's gross motor skills (Sari et al., 2020). One type of game that will be presented in this application is a digitally-based traditional hide-and-seek game. Despite being app-based, this game still maintains the essence of traditional hide-and-seek.

Similar research was conducted by Aushafil Karimah et al., who utilized the traditional game of "gobak sodor" or "galah panjang" in a classroom action research to improve children's gross motor skills. The research findings showed a significant improvement from 61% in Cycle I to 83% in Cycle II, exceeding the classical mastery target of 80%. Therefore, the traditional game of gobak sodor is considered effective in enhancing children's gross motor skills. Additionally, this game also provides benefits in training conflict management, problem-solving, language skills, communication, community awareness, and social behavior in children (Qomariah & Hamidah, 2022).

The development of fundamental movement skills in children progresses according to their age. However, without deliberate training and stimulation, it can potentially lead to an unhealthy lifestyle, obesity, and low participation in sports and other physical activities. Numerous studies have shown that gross motor skills are associated with physical activity, health-related fitness, and cardiometabolic health. One benefit of traditional games, such as the game of "engklek," is to enhance the gross motor skills of young children, including balance, physical strength, movement speed, agility, problem-solving, flexibility, and muscle strength (Qomariah & Hamidah, 2022).
Improving gross motor skills is crucial for children, as it involves the ability to perform and control body movements effectively. It includes exercises for eye-hand coordination, concentration, coordination of senses and body parts, self-confidence, body balance, courage, flexibility, muscle strength, and readiness for activities. Further studies conducted by Nurul Sinta Fauziah et al. investigated the utilization of jump rope or skipping games to enhance children's gross motor skills. This simple game utilizes rubber bands arranged into longer ropes for jumping. Jump rope games are not only enjoyable but also serve as a means of play and exercise.

In the summary of the 15 articles, there are similarities in enhancing children's gross motor skills. Traditional games from various regions generally share similarities, with differences primarily in their names. While the discussion has shed light on the positive impacts of traditional games on enhancing children's gross motor skills, it is crucial to acknowledge certain limitations within the scope of this literature review. Firstly, the majority of the discussed studies have focused on specific traditional games, such as hide-and-seek, gobak sodor, and engklek. While these games have demonstrated effectiveness in improving gross motor skills, the diversity of traditional games across different cultures and regions remains underexplored. The literature review may lack a comprehensive examination of the wide array of traditional games that could potentially contribute to children's motor skill development. Additionally, the studies presented mainly emphasize improvements in gross motor skills without delving deeply into potential variations in outcomes based on age groups or individual differences among children. Understanding these nuances is essential for tailoring interventions and recommendations to specific demographics. Furthermore, the long-term effects of incorporating traditional games into children's routines need further exploration, including sustained improvements in motor skills as they transition through different developmental stages. Lastly, while the literature review provides valuable insights, it is essential to recognize that the field is dynamic, and emerging research may introduce new perspectives and findings that were not covered in the current review. Future research endeavors should address these limitations to offer a more comprehensive understanding of the role of traditional games in enhancing children's gross motor skills.

CONCLUSION AND SUGGESTIONS

Based on the analysis of the literature, it can be concluded that traditional games have been proven to provide benefits in improving children's gross motor skills. Evidence from 15 articles demonstrates the successful implementation of traditional games in the learning process. Therefore, it can be inferred that traditional games can train balance, strengthen physical strength, enhance movement speed, sharpen agility, improve problem-solving abilities, as well as enhance body flexibility and muscle strength in children. In this study, the main aim was to investigate the important role of traditional games in improving children's gross motor skills through a literature review. Through this approach, the research aims to provide a deeper understanding of how traditional games can be a key element in children's gross motor development. The results of the literature review show that traditional games such as hide and seek, gobak sodor, engklek, and jump rope can effectively improve children's gross motor skills. The contribution of this unique research lies in the comprehensive literature on various traditional games and identifying their potential in supporting children's development. However, this research is not free from several limitations. First, the focus on specific games can be prohibitive, given that the diversity of traditional games has not been fully explored. In addition, the influence of age factors and individual differences on the results of improving motor skills needs to be studied further. Although it has provided valuable insights, this research does not cover the long-term aspects of
implementing traditional games in children’s routines. Therefore, in the future, further research could explore the long-term impact of the use of traditional games, taking into account age variables and individual characteristics of children.

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