



Student Learning Interest Through Speed Cone Game: Descriptive Study at Junior High School 5 Banjarbaru

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Abstrac: This study aimed to determine whether the Speed Cone game could improve students' interest in learning running activities at SMP Negeri 5 Banjarbaru. The research employed a quantitative descriptive approach using a survey method. The population consisted of all students participating in physical education learning, while the sample comprised 31 students selected as research participants. Data were collected using an interest-in-learning questionnaire and observation sheets as the research instruments. The findings revealed that the implementation of the Speed Cone game successfully increased students' learning interest in athletics, particularly running. The results showed that 58.1% of students were in the high category, 25.8% were in the very high category, and 16.1% were in the moderate category, with no students classified in the low or very low categories. It can be concluded that the Speed Cone game is an effective and innovative learning strategy for enhancing students' interest in physical education learning.

Keyword: Descriptive Study, Junior High School, Speed Cone Game, Student Learning

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INTRODUCTION

Movement is an essential aspect of human life because almost every daily activity involves physical movement. In physical education, movement is not only a means of improving physical fitness but also a medium for developing cognitive, affective, and psychomotor abilities. The development of movement skills occurs gradually, starting from simple and unorganized movements to more complex and well-coordinated motor skills that support students' physical and social development (Parwata, 2021). Therefore, physical education learning should be designed to provide meaningful and enjoyable movement experiences for students.

Motor learning aims to improve students' knowledge, attitudes, and movement skills through systematic practice. Fundamental movement skills such as walking, running, jumping, throwing, and balancing are basic competencies that need to be mastered from an early age because they become the foundation for more advanced sports skills (Abdussalam et al., 2024). Among these skills, running is one of the most important components because it supports the development of speed, agility, coordination, and physical fitness.

Speed is defined as an individual's ability to perform similar movements repeatedly or to cover a certain distance in the shortest possible time (Camacho-Sánchez et al., 2023). However, the success of running instruction is not determined solely by physical ability but also by students' interest and motivation to participate in learning activities. Learning activities that rely on repetitive drills often create boredom, resulting in low participation and reduced enthusiasm among students. The use of varied and innovative learning methods is one strategy to overcome students' boredom during the learning process. Learning variations can maintain students' attention, enthusiasm, and active participation, leading to improved learning outcomes (Prabowo & Mintarto, 2022). Game-based learning also provides a fun and challenging atmosphere, allowing students to learn movement skills naturally while increasing their motivation and learning interest.

Based on observations conducted during the teaching practicum at SMP Negeri 5 Banjarbaru, several problems were identified in athletics learning, particularly in running activities. Many students demonstrated low running performance and showed limited interest in participating in the lesson. During learning activities, some students tended to chat with their classmates, lacked enthusiasm in completing running tasks, and preferred to finish the lesson as quickly as possible. The learning process was still dominated by conventional running drills, making the activities monotonous and less engaging. As a result, students' participation and learning interest were not optimal.

Several previous studies have highlighted the importance of game-based learning in enhancing students' engagement, motivation, and interest in physical education. Game-based learning approaches have been shown to increase student participation and learning enthusiasm in physical education classes (Fauziah et al., 2025; Makruf et al., 2026). In addition, research by (Prabowo & Mintarto, 2022) reported that fun and modified game approaches significantly improve students' motivation in PJOK learning. Similar findings were also stated by Kurniawan et al. (2021), who found that students' learning interest is closely related to active participation and enjoyable learning environments in physical education. Furthermore, Fauziah et al. (2025) reported that the implementation of Game-Based Learning significantly increased student participation in PJOK learning, reaching 90.7% in the very good category. Likewise, Unorrizqo et al. (2026) emphasized that game-based learning innovations can improve student engagement through interactive learning media in PJOK. Other studies also support that cone-based and modified game activities can significantly increase students' learning motivation and involvement in physical education learning processes. In addition, research on traditional game-based learning also found a positive effect on students' learning interest in PJOK (Arik et al., 2025). However, most previous studies still focus on learning motivation, participation, motor skills, and learning outcomes, while studies specifically examining students' learning interest as the main variable remain limited.

The novelty of this research lies in its focus on students' learning interest through the implementation of the Speed Cone game in physical education learning at SMP Negeri 5 Banjarbaru. Unlike previous studies that mainly examined motivation, motor skills, or learning

outcomes, this study specifically emphasizes learning interest as the primary indicator. In addition, this research provides a descriptive analysis of students' learning interest in the context of Speed Cone game implementation. Therefore, this study contributes a new perspective on how game-based learning can be used not only to improve participation and motivation, but also to describe students' learning interest in physical education learning at the junior high school level.

Previous studies have shown that game-based learning can increase students' motivation, participation, and interest in athletics learning (Prabowo & Mintarto, 2022). However, research specifically examining the implementation of the Speed Cone game to improve students' learning interest in running activities at SMP Negeri 5 Banjarbaru is still limited. Therefore, this study aims to analyze the effectiveness of the Speed Cone game in improving students' learning interest in physical education, particularly in running lessons, and to provide an innovative learning strategy that can be applied by physical education teachers.

METHOD

Research Design

This study employed a descriptive quantitative approach using a survey method to examine students' learning interest in running instruction through the implementation of the Speed Cone game. The study focused on describing students' responses and learning interest after participating in game-based physical education activities. A survey design was selected because it allows researchers to systematically collect and analyze participants' perceptions and attitudes toward the learning process. The study involved one independent variable and one dependent variable. The independent variable was the implementation of the Speed Cone game as an instructional strategy in running lessons, while the dependent variable was students' learning interest during physical education classes.

Participants

The research was conducted at SMP Negeri 5 Banjarbaru after obtaining approval from the Department of Physical Education, Faculty of Teacher Training and Education, Lambung Mangkurat University. The participants of this study were Grade VII students who were actively enrolled in physical education classes. This study employed a purposive sampling technique, in which participants were selected based on specific inclusion criteria relevant to the research objectives. The criteria included students who actively participated in physical education learning and were available during the research implementation period. A total of 31 students were selected as the research sample.

Instrument

Data were collected using a structured questionnaire adapted from the instrument developed by Ni'am (2019) to measure students' learning interest in short-distance running activities. The instrument was based on the theoretical framework of learning interest and consisted of 27 items covering six indicators: attention, attraction, learning activities, family support, school support, and environmental support. The questionnaire employed a four-point Likert scale consisting of Strongly Agree, Agree, Disagree, and Strongly Disagree. The use of a four-point scale was intended to avoid neutral responses and obtain more accurate responses from participants. Of the 29 items tested, 27 items were declared valid, while 2 items (items 22 and 29) were excluded because their correlation coefficients were lower than the critical value ($r\text{-table} = 0.238$). Therefore, the final instrument consisted of 27 valid items. Before being administered in this study, the research instrument underwent an expert judgment process involving three experts in the field of Physical Education and Sports. The experts evaluated the instrument in terms of content relevance, language clarity, and the appropriateness of each item for measuring students' learning interest in physical education. Based on their evaluation and recommendations, the instrument was deemed valid and suitable for data collection. Thus, the instrument used in this study had established evidence of validity from previous research and was further validated by three expert lecturers to ensure its suitability for the present research context.

Data Collection

The data collection process consisted of several stages. First, the researcher identified the target population of Grade VII students at SMP Negeri 5 Banjarbaru. Second, the selected participants were informed about the research objectives and procedures. Third, the Speed Cone game was implemented during running instruction in physical education classes. Finally, students completed the learning-interest questionnaire, and the responses were collected for further analysis.

Data Analysis

The collected data were analyzed using descriptive statistical techniques. Students' questionnaire scores were calculated and classified into five categories: very high, high, moderate, low, and very low learning interest. The categorization of students' learning interest was based on the ideal mean (Mi) and ideal standard deviation (SDi) approach, which is commonly used in educational research to determine score interpretation levels.

In addition, percentage analysis was employed to determine the proportion of students in each learning interest category. The percentage for each category was calculated using the formula: $\text{Percentage} = (f / N) \times 100\%$, where f represents the frequency of students in a particular category and N represents the total number of participants. The percentage results were used to describe the distribution of students' learning interest across all categories. The analysis was conducted to describe the distribution of students' learning interest after the implementation of the Speed Cone game and to determine its effectiveness as an innovative instructional strategy in physical education learning.

RESULT

Students' Learning Interest Through the Speed Cone Game

The descriptive analysis was conducted on 31 students of SMP Negeri 5 Banjarbaru to determine their learning interest in athletics, particularly running lessons, after the implementation of the Speed Cone game. The results were classified into five categories: Very High, High, Moderate, Low, and Very Low.

Table 1. Distribution of Students' Learning Interest Through the Speed Cone Game

Score Range	Category	Frequency (f)	Percentage (%)
92-108	Very High	8	25.8
75-91	High	18	58.1
58-74	Moderate	5	16.1
41-57	Low	0	0.0
27-40	Very Low	0	0.0
Total		31	100.0

Table 1 shows that the majority of students were classified in the High category, accounting for 18 students (58.1%). Furthermore, 8 students (25.8%) were classified as Very High, while 5 students (16.1%) were categorized as Moderate. No students were included in the Low or Very Low categories. These findings indicate that most participants demonstrated a positive learning interest after participating in running lessons through the Speed Cone game.

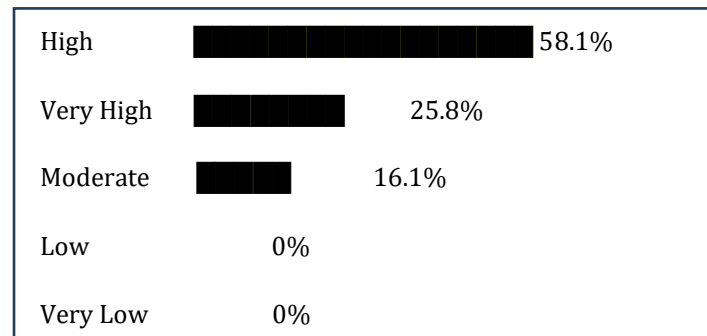


Figure 1. Distribution of Students' Learning Interest Through the Speed Cone Game

Figure 1 illustrates that the High category dominates the distribution of students' learning interest, followed by the Very High and Moderate categories. The absence of students in the Low and Very Low categories suggests that the implementation of the Speed Cone game successfully created a more engaging and enjoyable learning environment. The classroom observations also revealed noticeable behavioral changes after the implementation of the Speed Cone game. Before the intervention, students tended to perceive running activities as repetitive and physically demanding, resulting in low participation and limited enthusiasm during physical education lessons. Several students appeared passive and were less focused on the teacher's instructions.

After the Speed Cone game was introduced, students became more actively involved in learning activities. They demonstrated greater enthusiasm, actively participated in group challenges, and showed increased confidence in completing running tasks. The incorporation of game elements transformed conventional running drills into enjoyable learning experiences, encouraging students to participate without feeling bored or pressured. Overall, 83.9% of students were classified into the High and Very High categories, indicating that the Speed Cone game effectively enhanced students' learning interest in athletics, particularly running instruction. These findings suggest that game-based learning can serve as an effective instructional strategy for promoting active participation, motivation, and positive learning experiences in physical education classes.

DISCUSSION

Improvement of Students' Learning Interest Through the Speed Cone Game

The findings of this study indicate that the implementation of the Speed Cone game successfully improved the learning interest of students at SMP Negeri 5 Banjarbaru in athletics, particularly in running lessons. The improvement was reflected in several dimensions of learning interest, including attention, attraction, family support, school support, and environmental support, all of which contributed to students' engagement during the learning process.

From the perspective of attention, the results revealed that most students responded positively to the learning activities conducted by the teacher. Only a small proportion of participants agreed that the assessment system did not meet their needs or that the teacher failed to explain the material clearly. These findings suggest that the teacher effectively managed the learning process, enabling students to participate more actively and understand the instructional content more efficiently. This finding is consistent with the view that physical education should be designed creatively and innovatively according to students' characteristics, while teachers function not only as instructors but also as facilitators who create enjoyable and meaningful learning experiences (Parwata, 2021). The Speed Cone game transformed conventional running drills into interactive activities, successfully capturing students' attention throughout the lesson.

Regarding students' attraction to learning, most participants disagreed with the statements that they disliked running lessons or considered running activities boring because of the hot outdoor environment. This finding indicates that students developed a more positive attitude toward running instruction after participating in the Speed Cone game. Instead of repeatedly

performing conventional running exercises, students engaged in challenging and enjoyable game-based activities that increased their enthusiasm and participation.

The present findings support the theory of educational games, which emphasizes that game-based learning creates enjoyable educational experiences while simultaneously enhancing students' motivation and learning interest. By integrating play into the instructional process, students become more actively involved without feeling pressured by the learning tasks. In this study, the Speed Cone game successfully transformed running lessons into engaging learning experiences that encouraged greater student participation (Camacho-Sánchez et al., 2023).

Furthermore, the findings support the learning interest theory, which suggests that students' interest is strongly influenced by the quality and attractiveness of the learning environment. Learning activities that are enjoyable and adapted to students' needs are more likely to stimulate interest and motivation. The implementation of the Speed Cone game provided an enjoyable atmosphere that increased students' attention, curiosity, and willingness to participate in running activities (Desiga & Jabar, 2017). Learning interest is closely associated with feelings of enjoyment, attention, and attraction toward an activity. Students with high learning interest generally demonstrate greater enthusiasm, active participation, and confidence during learning activities. Classroom observations confirmed this pattern, as students became more willing to participate, actively performed movement tasks, and enthusiastically followed the teacher's instructions after the implementation of the Speed Cone game (Camacho-Sánchez et al., 2023). External factors also contributed to the improvement of students' learning interest. Family support played a significant role in encouraging students to participate in sports activities and running lessons. Parents who provided motivation and encouragement helped increase students' confidence and willingness to engage in physical education activities.

School support also contributed positively, although some students perceived that athletics facilities could still be improved. Despite these limitations, teachers effectively utilized the available resources by implementing game-based learning strategies, demonstrating that instructional creativity can compensate for limited facilities and create meaningful learning experiences. Environmental factors further strengthened students' interest in learning. The availability of sports fields, supportive peers, and community sports activities provided opportunities for students to practice and develop their movement skills outside the classroom, reinforcing their interest in athletics and running activities.

The findings of this study are consistent with previous research reporting that variations of fundamental athletics games significantly improve students' motivation, learning interest, and participation in physical education classes. The study demonstrated that game-based learning creates a more enjoyable classroom atmosphere, enabling students to understand instructional materials more effectively and participate more actively (Prabowo & Mintarto, 2022). In addition, the findings support the physical fitness theory, which states that physical activities presented through varied and enjoyable methods can enhance students' enthusiasm and participation. Monotonous activities tend to generate boredom, whereas game-based activities promote enjoyment and encourage students to move more actively. Similar observations were made in this study, where students demonstrated higher levels of enthusiasm and engagement after running instruction was delivered through the Speed Cone game (Anggraini et al., 2025).

Overall, the findings confirm that the Speed Cone game is an effective instructional innovation for physical education, particularly in running lessons. The implementation of this game improved students' attention, interest, motivation, active participation, and self-confidence throughout the learning process. Learning activities that were previously perceived as repetitive and exhausting became enjoyable, challenging, and meaningful experiences, allowing instructional objectives to be achieved more effectively.

Students' Learning Interest Through the Speed Cone Game

The descriptive analysis showed that students' learning interest after the implementation of the Speed Cone game was predominantly classified as High, with 18 students (58.1%), followed by Very High, with 8 students (25.8%), and Moderate, with 5 students (16.1%). No participants

were categorized as having Low or Very Low learning interest, indicating that the majority of students developed positive attitudes toward running instruction after the intervention.

Classroom observations revealed that, before the implementation of the Speed Cone game, many students perceived running activities as physically demanding, repetitive, and uninteresting. Traditional running drills often resulted in boredom, reduced participation, and limited enthusiasm. Some students appeared passive, frequently interacted with their peers during instruction, and lacked confidence because they considered their physical abilities inferior to those of their classmates.

Following the implementation of the Speed Cone game, substantial behavioral changes were observed. Students became more enthusiastic when the teacher explained the game rules, participated more actively in learning activities, and demonstrated greater motivation to complete every challenge. Previously passive students showed increased confidence and willingly participated in group activities. The competitive and collaborative nature of the game created a dynamic learning environment that was significantly more engaging than conventional running instruction.

These findings are supported by (Abdussalam et al., 2024), who stated that learning interest is characterized by enjoyment, attention, and attraction toward an activity. Students with strong learning interest tend to participate actively and enthusiastically, a pattern that was consistently observed throughout this study. The findings are also consistent with Desiga & Jabar (2017), who argued that learning interest is influenced by students' learning experiences. Learning activities that are enjoyable, meaningful, and appropriate to students' characteristics are more likely to increase motivation and engagement. Through the Speed Cone game, students experienced running not only as physical exercise but also as an enjoyable activity involving teamwork, competition, and interaction. Slameto (2019) explained that learning interest is a sense of preference and attachment to a learning activity without external coercion. Students who have a high level of interest tend to show greater attention, active involvement, and persistence during the learning process. Similarly, Uno (2019) stated that learning motivation and interest are closely related, as interesting learning activities can stimulate students' enthusiasm and willingness to participate in learning. Therefore, the implementation of the Speed Cone game provided a learning environment that was enjoyable, challenging, and interactive, which contributed to fostering students' learning interest in physical education classes.

The educational game theory proposed by Fauziah et al. (2025) further supports these findings, emphasizing that game-based learning creates enjoyable educational experiences that enhance students' motivation and learning interest. Likewise, (Parwata, 2021) highlighted the importance of innovative physical education strategies that encourage active participation and meaningful learning experiences. The present findings also support (Anggraini et al., 2025) perspective that enjoyable and varied physical activities increase students' enthusiasm and participation while reducing boredom. This study demonstrated that students showed considerably greater enthusiasm when running instruction was integrated into game-based activities rather than conventional repetitive drills.

Despite these positive findings, this study has several limitations. First, the research was conducted only with students from one junior high school, which may limit the generalizability of the findings to other educational settings. Second, the study employed a descriptive research design, so it was not intended to examine causal relationships or compare the effectiveness of the Speed Cone game with other instructional strategies. Third, the data were collected using a questionnaire, which relied on students' self-reported perceptions and may not fully represent their actual learning behavior. Therefore, future studies are recommended to involve larger and more diverse samples, apply experimental or quasi-experimental designs, and incorporate additional data collection methods, such as observations or interviews, to obtain a more comprehensive understanding of the effectiveness of the Speed Cone game in physical education learning.

CONCLUSION

This study demonstrates that the implementation of the Speed Cone game has a positive impact on increasing students' learning interest in Physical Education, particularly in sprint running lessons at SMP Negeri 5 Banjarbaru. The game-based learning approach successfully transformed conventional running activities into more engaging, interactive, and enjoyable experiences, encouraging students to participate more actively during the learning process. Improvements were evident in several aspects of learning interest, including attention, enthusiasm, motivation, and active involvement, indicating that innovative instructional strategies can effectively enhance students' engagement in physical education classes. The findings indicate that the majority of students demonstrated a high level of learning interest after the implementation of the Speed Cone game. Overall, the game proved to be an effective instructional strategy for fostering students' learning interest and encouraging active participation in physical education, particularly in running lessons. These results suggest that integrating game-based activities into athletics instruction can create a more supportive and motivating learning environment, leading to greater student participation and positive learning experiences.

Based on these findings, Physical Education teachers are encouraged to incorporate the Speed Cone game or other innovative learning models into athletics lessons to improve student engagement and motivation. Schools should also support the development of creative teaching strategies by providing adequate facilities and opportunities for teachers to implement active learning approaches. Furthermore, future studies are recommended to involve larger and more diverse samples, apply experimental or longitudinal research designs, and investigate the effectiveness of Speed Cone activities on other learning outcomes, such as motor skills, physical fitness, academic achievement, and students' long-term participation in sports.

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