
The Effect of Using Structured Sports Video Media on Improving Basic Movement Skills of Students at SDN 7 Salotungo

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A. Conception and design of the study; **B.** Acquisition of data;
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ABSTRACT

This study aims to determine the effect of the use of structured sports video media on improving students' basic movements at SDN 7 Salotungo. This type of research is a quasi-experimental design with a population of all students in grades III and IV totaling 120 students. The research sample was 60 students divided into two groups, namely the experimental group and the control group, each with 30 students. The research instrument used a basic movement test that included walking, running, jumping, and throwing. Data analysis used an independent t-test with a significance level of 0.05. The results showed that there was a significant difference between the experimental group and the control group in improving students' basic movements ($p < 0.05$). The average increase in basic movement scores in the experimental group was 28.5%, while the control group only increased by 8.2%. In conclusion, the use of structured sports video media has been proven effective in improving elementary school students' basic movements.

Keywords : Video Media, Sports; Basic Movement; Learning; Physical Education.

INTRODUCTION

Physical education is an integral part of overall education and plays a vital role in developing the quality of human resources from an early age. Through physical education, students develop not only physical aspects but also cognitive, affective, and social aspects (Oliveira et al., 2025). One of the main focuses of physical education learning in elementary schools is improving fundamental motor skills, which serve as the foundation for developing more complex sports skills in the future.

Fundamental motor skills are fundamental abilities that every student must master, especially during elementary school, as this period is the optimal phase for motor development (Lengkana et al., 2022). Fundamental movement encompasses various movement patterns such as walking, running, jumping, throwing, catching, hitting, and balancing. These skills provide the foundation for students to undertake more complex and structured physical activities. However, initial observations at SDN 7 Salotungo indicate that many students have not yet optimally mastered fundamental motor skills. Some students still exhibit poor coordination when running, jumping, and throwing.

Various factors can contribute to students' difficulty mastering basic movements, including a lack of varied learning methods, limited sports facilities and infrastructure, and a lack of student motivation in physical education lessons (Quoc, 2024). Many physical education teachers still use conventional teaching methods, which tend to be monotonous and unappealing to modern students. In today's digital age, students are accustomed to a variety of engaging visual stimuli, so traditional learning methods often fail to maintain their attention and motivation (Rashid et al., 2024).

The use of technology in learning is one solution that can be implemented to improve the effectiveness of the teaching and learning process. Video learning media has been shown to have a positive impact on improving understanding and retention of learning material compared to conventional learning methods (Nur Azmi Alwi & Putri Lestari Agustia, 2024). Video media has the ability to present movements visually and dynamically and can be repeated repeatedly, enabling students to more easily grasp correct movement techniques. Furthermore, video media can increase student motivation and engagement due to its interactive and attention-grabbing nature.

Previous research has demonstrated the effectiveness of using video media in learning various subjects. However, specific research on the effect of structured sports video media on improving elementary school students' fundamental motor skills is still limited, especially in the Makassar context (Purnamaningsih et al., 2025). Therefore, comprehensive research is essential to fill this research gap. This study was designed to empirically determine whether the use of structured sports video media can significantly improve students' fundamental motor skills at SDN 7 Salotungo, and to provide practical recommendations for physical education teachers in implementing video media as an effective learning tool.

The purpose of this study was to determine the effect of the use of structured sports video media on improving students' fundamental motor skills at SDN 7 Salotungo, Makassar. This research is expected to make a significant contribution to improving the quality of physical education learning and provide empirical evidence of the effectiveness of video media in improving elementary school students' fundamental motor skills.

METHODS

This study employed a quasi-experimental design with a quantitative approach. The study population comprised all 120 third and fourth grade students at SDN 7 Salotungo. The sampling technique used purposive sampling, with inclusion criteria including attendance of at least 80% of class time and no physical limitations that hinder movement. Based on these criteria, a sample of 60 students was obtained, divided into two groups: an experimental group and a control group, each with 30 students (Farid et al., 2023).

The independent variable in this study was the use of structured exercise videos, while the dependent variable was the improvement of students' fundamental movement skills. The videos used in this study were instructional videos developed and validated by physical education experts. The videos featured demonstrations of fundamental movements performed by professional athletes or experienced coaches, with clear and easy-to-understand technical explanations. Each video lasted between 5 and 10 minutes and was designed to suit the ability level of third and fourth grade students.

The data collection instrument used was a fundamental movement test designed based on motor assessment standards for elementary school students. The fundamental movement test covers four main aspects: walking, running, jumping, and throwing. Each aspect is assessed using a structured assessment rubric on a scale of 0-100. This test was

administered at two points in time: before the intervention (pretest) and after the intervention (posttest) to determine improvements in students' fundamental movement abilities. This instrument has been tested for validity and reliability, with a Cronbach's alpha coefficient of 0.82, indicating a high level of reliability.

The experimental group received a structured sports video learning treatment for 12 weeks, three times per week, with each session lasting 35 minutes. At the beginning of the lesson, students watched a video showing a demonstration of fundamental movements guided by clear narration. After watching, students practiced directly under teacher guidance, using the video as a visual reference. The teacher provided feedback and corrected technique for each student during the practice phase. The control group received conventional learning without the use of video, using a live teacher demonstration and manual practice.

Data analysis was conducted using descriptive and inferential statistics. Descriptive statistics were used to describe sample characteristics and mean fundamental movement scores in the pretest and posttest. Data normality was tested using the Shapiro-Wilk test with a significance level of 0.05. Homogeneity of variance was tested using the Levene test. After ensuring the data were normally distributed and variances were homogeneous, an independent t-test was conducted to compare the improvement in basic movement between the experimental and control groups. The significance level used was 0.05. In addition, the effect size was calculated using Cohen's *d* to determine the magnitude of the intervention's influence on the improvement in basic movement. All data analyses were performed using SPSS version 25 software.

RESULTS AND DISCUSSION

The characteristics of the research sample indicate that the experimental and control groups were balanced in terms of age, gender, and initial educational background. The average age of students in both groups was 8-9 years, with a relatively even gender distribution. A baseline homogeneity test revealed no significant differences between the two groups at the pretest ($t = 0.487$, $p = 0.628$), ensuring that the comparison was valid and minimizing bias from confounding variables.

Pretest results showed a mean fundamental movement score of 45.8 (SD = 8.3) for the experimental group and 46.2 (SD = 7.9) for the control group. Both groups exhibited relatively similar baseline conditions in fundamental movement abilities. After 12 weeks of intervention, posttest results showed distinct improvements between the two groups. The experimental group experienced an increase in fundamental movement scores to 74.3 (SD = 6.5), a mean increase of 28.5 points, while the control group's score increased to 50.4 (SD = 7.2), a mean increase of only 4.2 points.

The results of an independent t-test on the posttest data showed a highly significant difference between the experimental and control groups in fundamental movement scores ($t = 15.342$, $df = 58$, $p < 0.001$). The effect size (Cohen's $d = 3.75$) indicated that the use of structured exercise videos on fundamental movement improvement was significant. The percentage increase in fundamental movement scores in the experimental group reached 62.2%, significantly higher than the control group's 9.1%. These results indicate that structured exercise videos significantly contributed to the improvement of students' fundamental movement.

Further analysis of individual fundamental movement aspects showed that structured exercise videos had a consistent impact on all measured fundamental movement aspects.

In the walking aspect, the experimental group showed an average increase from 45.1 to 73.8, while the control group only increased from 46.2 to 50.1. The running aspect showed the greatest increase in the experimental group, from 46.3 to 75.2, while the control group only increased from 46.5 to 51.3. The jumping aspect showed an increase from 45.9 to 72.5 in the experimental group, and from 46.1 to 49.8 in the control group. The throwing aspect also showed a similar pattern, increasing from 46.7 to 75.4 in the experimental group, and from 46.3 to 50.7 in the control group. This consistent pattern of improvement indicates that video media has a holistic positive effect on all components of fundamental movement.

The discussion of the results of this study is supported by various relevant theories and previous research. Structured sports video media has been proven effective in improving students' fundamental movement due to several advantages over conventional methods. First, video media allows for clear visualization of movement and can be repeated repeatedly, thus facilitating deeper learning (Habibie et al., 2022). Cognitive load theory explains that well-structured visual presentations can reduce students' cognitive load and facilitate information processing. Videos designed with these pedagogical principles in mind can enhance students' understanding of correct movement techniques.

Second, video media increases student motivation and engagement in physical education learning (Supriyani Sirregar et al., 2025). Modern students are more responsive to dynamic and interactive visual stimuli. The use of video media makes learning more engaging and relevant to the daily lives of students already accustomed to digital technology. This increased motivation directly contributes to increased student participation and engagement in the learning process, ultimately improving their learning outcomes.

Third, video media facilitates student-centered learning (Susanto et al., 2022). Through video, students can learn at their own pace, replay sections they don't understand, and observe technical details that might be missed during a live teacher demonstration. This flexibility allows students with different learning styles to learn optimally. Visual learners can benefit maximally from visual presentations in videos, while kinesthetic learners can practice based on the models shown in the videos for greater understanding.

Fourth, structured video media ensures consistency in the delivery of learning materials (Artman, 2020). Live teacher demonstrations may not always be consistent or perfect, while instructional videos can display ideal and consistent movement techniques each time. This consistency is especially important in learning basic movements, as students need to observe the correct model repeatedly to internalize the correct movement patterns. This aligns with Bandura's principle of observational learning, or learning by imitation, which suggests that observing appropriate models is an effective way to learn new behaviors and skills (Rhoads, 2022).

The significant difference in the results of this study can also be explained by more effective reinforcement and feedback mechanisms. The experimental group received visual feedback via video and verbal feedback from the teacher, while the control group received only verbal feedback. This combination of visual and verbal feedback has been shown to be more effective in helping students identify technical errors and make corrections (Edmison & Edwards, 2019). Social learning theory emphasizes the importance of observation, imitation, and reinforcement in the learning process, all of which are well-accommodated in a video-based learning approach.

The findings of this study align with previous research demonstrating the effectiveness of using video media in learning movement and sports (Sumarsono & Anisa, 2019). However, the large effect size in this study ($d = 3.75$) indicates that the influence of structured sports video media at SDN 7 Salotungo is even greater than that reported in

some previous studies. This may be due to factors such as good video quality, optimal integration of video with hands-on activities, and student characteristics that are responsive to visual technology.

However, this study also revealed several challenges in implementing the use of video media in physical education learning. First, not all students have equal access to technology at home, so video-based learning can only be optimized in schools. Second, teachers require special training to effectively use video media and integrate it with practical learning activities. Third, over-reliance on video media without the support of direct practice can reduce learning effectiveness because fundamental movements are ultimately skills that must be practiced physically.

CONCLUSION

Based on the research results presented, it can be concluded that the use of structured exercise videos significantly improved students' fundamental motor skills at SDN 7 Salotungo. The increase in fundamental motor skills scores in the group using the videos reached 62.2%, significantly higher than the control group, which only increased by 9.1%. This significant difference ($p < 0.001$) with a very large effect size ($d = 3.75$) indicates that structured exercise videos are a highly effective learning tool for improving elementary school students' fundamental motor skills. The effectiveness of these videos was consistently seen across all aspects of fundamental movement measured, including walking, running, jumping, and throwing.

Based on these conclusions, the researchers offer several recommendations. First, physical education teachers at SDN 7 Salotungo and other elementary schools in Makassar are advised to integrate structured exercise videos into physical education lessons, particularly in teaching fundamental movements. This integration should be achieved by combining video demonstrations with hands-on practice and personalized feedback from teachers. Second, schools are advised to provide facilities and infrastructure that support the use of video learning media, including rooms with adequate audio-visual equipment. Third, physical education teachers are advised to participate in training on the development and use of video media in sports learning to maximize its potential. Fourth, future researchers are advised to conduct further research on different types of sports videos, optimal duration, or the combination of video media with other technologies such as augmented reality or virtual reality in improving students' motor skills.

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