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Enhancing Massage Course Training in Sports Education through Validated and Practical Audio-Visual Learning Media

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ABSTRAK

Penelitian ini mengidentifikasi masalah dalam pengajaran teknik pijat pada program pendidikan olahraga, terutama terkait dengan pemahaman dan keterampilan mahasiswa yang belum optimal. Untuk meningkatkan hasil pembelajaran, penelitian dan pengembangan (R&D) ini menerapkan model ADDIE, yang berfokus pada pembuatan dan validasi media pembelajaran berbasis video yang dirancang khusus untuk mata kuliah pijat. Subjek penelitian melibatkan ahli materi dan media serta mahasiswa pendidikan olahraga dari Universitas Negeri Padang. Hasil validasi menunjukkan bahwa konten video memenuhi standar akademik dan desain yang tinggi, dengan perolehan nilai 88,33% dari ahli materi dan 94,54% dari ahli media. Uji kepraktisan pada mahasiswa menunjukkan hasil positif, dengan skor 85,9% untuk kelompok kecil dan 85,2% untuk kelompok besar, menunjukkan efektivitas dan kemudahan penggunaan media tersebut. Temuan ini mengindikasikan bahwa media pembelajaran berbasis video dapat secara signifikan meningkatkan pemahaman dan keterlibatan dalam mata pelajaran yang kompleks. Pendekatan ini memberikan fleksibilitas dan mendukung berbagai gaya belajar, berpotensi meningkatkan hasil pendidikan serta mendukung lingkungan pembelajaran yang lebih interaktif.

ABSTRACT

This study addresses issues in teaching massage techniques within sports education programs, particularly concerning students' inadequate understanding and skill development. To enhance learning outcomes, this research and development (R&D) study employed the ADDIE model, focusing on the creation and validation of video-based learning media specifically designed for massage courses. The research subjects included material and media experts as well as sports education students from Padang State University. Validation results indicated that the video content met high academic and design standards, achieving scores of 88.33% from material experts and 94.54% from media experts. Practicality tests with students yielded positive feedback, with scores of 85.9% for the small group and 85.2% for the large group, demonstrating the media's effectiveness and user-friendliness. These findings suggest that video-based learning media can significantly improve understanding and engagement in complex subjects. This approach offers flexibility and supports diverse learning styles, potentially enhancing educational outcomes and fostering a more interactive learning environment.

1. INTRODUCTION

Sport education is a field that focuses on developing knowledge, skills, and attitudes necessary to enhance physical potential and athletic performance. In this context, sports education goes beyond physical training, encompassing an understanding of health principles, injury management, and physical recovery (Balakrishnan Nair, 2022; Umar et al., 2023). The goal of sport education is to create athletes and professionals who possess a comprehensive understanding of how to maintain optimal performance through various strategies, including training and body care (Faigenbaum & Myer, 2010; Radicchi & Mozzachiodi, 2016).

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One essential aspect of sport education is the training of skills related to physical recovery, such as massage course training. Massage training in sports education aims to equip individuals with the knowledge and skills necessary to support athletes in reducing muscle tension, accelerating recovery processes, and preventing injuries (Jiang & Ning, 2023; Mentara et al., 2022). These massage skills are expected to improve the quality of care received by athletes and enhance their performance on the field. In these courses, students are taught about human anatomy, massage techniques suitable for various physical conditions, and their practical applications in sports contexts (Hite et al., 2019; Montaner Sanchis et al., 2022).

However, massage training in sports education often faces several challenges. First, the quality of training materials used is often less relevant to the latest advancements in the field, particularly concerning technology and innovations in sports health (Borges Gomes et al., 2023; Viet & Hanh, 2021). Second, limitations in teaching methods and practical skill evaluations make it difficult for trainees to reach the competency required in the professional world. Moreover, the lack of adequate facilities and skilled instructors in this field also poses obstacles, leaving many graduates of sports massage programs underprepared for entering the workforce with sufficient expertise (Husain et al., 2022; Utami, 2015).

The success of the learning process is influenced by various factors, including the role of lecturers in these activities (Ockta et al., 2024; Umar et al., 2023). To ensure that students can understand the material well, lecturers need to make careful preparations and choose the right learning aids (Demircioglu et al., 2022; Putri et al., 2021). An effective learning process in the classroom must be able to facilitate students in practicing actively through various forms of activities (Pitnawati et al., 2023; Safitri et al., 2024). Therefore, it is important for lecturers to think about ways for students to process the information presented properly. The learning process is a communication process that takes place in a system, so that learning media has a fairly important position as one of the components in the learning system (Insani et al., 2024; Nolastname et al., 2021). Learning media functions as an intermediary in learning communication because media is a means used to convey messages from the sender to the receiver, so that it can stimulate thoughts, feelings, interests, and attention (Jasiyah et al., 2024; Lange & Costley, 2020). Learning messages designed in the form of learning media will make learning communication more effective and efficient (Alfita et al., 2024; Nolastname et al., 2021).

The existence of learning media is an innovation in the field of education, and to achieve educational goals, special expertise in the field of media technology is needed (Jannah & Sandika, 2023; Yusuf et al., 2021). The benefits of learning media will make it easier for lecturers to overcome problems in the learning process (Daryanes et al., 2023; Djazilan & Hariani, 2022). So that with that it is necessary to develop learning media because it can improve the quality of learning (Abuhassna et al., 2020; Daryanes et al., 2023). In addition, learning media is also a tool or channel of communication, such as prints, audio, visuals, videos, objects, and people (Pratama et al., 2023; Sukmawati et al., 2022). One type of media that can be used by educators to conduct learning is audio-visual media (Afriza, 2022; Khumaedi et al., 2021). Audio-visual media also contains a variety of visible sounds and images, such as sound slides, movies of various sizes, and video recordings (Armah, 2021; Fridayanti et al., 2022). In general, students tend to like video learning and report that it increases their satisfaction in learning.

However, based on the observation results, the learning process in the massage course is still not optimal. This is evidenced by the results of a questionnaire survey conducted on students majoring in sports education. with an average percentage of 61.3% which is relatively lacking. In addition, out of 94 students, there were 26 students who had difficulties in understanding massage courses, especially in massage manipulation technique material. This low result is caused by various factors, one of which is the use of learning media that has not been effective in improving students' understanding and skills regarding massage manipulation techniques.

Based on these problems, the need for video-based learning media is considered appropriate to use, especially in massage manipulation technique material, because it is easy to use by all students and can be played back so that students have the opportunity to explore the material taught by lecturers. The novelty of this study create video-based learning media can simplify complex material to understand in the learning process, especially in massage materials. The use of video media in learning is important because students get a direct overview of the material provided by the lecturer and examples of the application of the material. This can add to the appeal of learning videos. Based on the identified issues, the researcher aims to develop and validate an audio-visual learning media for massage courses specifically designed for sports education students, as well as to assess its validity and practicality.

2. METHOD

The type of research conducted is research and development (R&D) using the ADDIE model which consists of the stages of analysis, design, development, implementation, and evaluation (Cahyadi, 2019). The test subjects of this research and development activity included expert lecturers in the media field, material field, and students of the Department of Sports Education, Faculty of Sports Science, Padang State University totaling 149 people for large groups and 15 people for small groups. This research was conducted at Labor Massage, Faculty of Sports Science, State University of Padang, Lubuk Buaya. The analysis stage aims to identify the problems faced by students and the needs required in achieving the learning objectives of the massage course. These activities were carried out by FGDs and filling out questionnaires.

After analyzing, several important things were designed, namely: (1) Develop content outline, narration, layouts, media editor; (2) Video recording, editing, and voice over; (3) Content merging, layout and narration adjustments. The development stage is the stage of preparing expert validation instruments, preparing student practicality instruments, validation tests by several experts. Furthermore, it was implemented in the media practicality trial to students of the Department of Sports Education, Faculty of Sports Science, Padang State University, totaling 149 people for large groups and 15 people for small groups. The evaluation stage is the data processing stage carried out to analyze the results of the implementation of teaching media and improve the media if still needed.

The data collection technique was carried out using a questionnaire to content/material experts and design/media experts with the aim of analyzing the validity of the developed video media trial process. The questionnaire was also given via google from to students of the Department of Sports Education, Faculty of Sports Science, Padang State University with the aim of analyzing student assessments of the practicality of the learning video media developed (Puspitarini & Hanif, 2019). The results obtained were analyzed using descriptive analysis. The assessment results obtained from the validity trial questionnaire of several experts can be calculated. After that, it can be known to make decisions based on the assessment results obtained with Table 1.

Table 1. Product Assessment Categories

Achievement Level	Qualification	Description
90% - 100%	Very good	No need to revise
75% - 89%	Good	No need to revise
65% - 74%	Simply	Revised
55% - 64%	Less	Revised
0% - 54%	Very Less	Very Less

3. RESULT AND DISCUSSION

Result

Validation by material experts was carried out to obtain the score. Based on the results of validation conducted by material experts, the results is show in Table 2.

Table 2. Validation of Assessment by Material Experts

Total Answer Score	Total number of questionnaire items (N)	Highest score	Percentage Result	Qualification
106	24	5	88.33%	Good

Validation by media experts was carried out. Based on the results of validation conducted by media experts, the results of media expert is show in Table 3.

Table 3. Validation of Assessment by Media Experts

Total Answer Score	Total number of questionnaire items (N)	Highest score	Percentage Result	Qualification
104	22	5	94.54%	Very good

Base on Table 3, the media practicality trial was conducted by 15 students in a small group and 149 students in a large group of the FIK UNP Department. Based on the results of the trials conducted is show in Table 4.

Table 4. Results of Practicality Trial of Learning Video

Trial	Total Answer Score	Number of Subjects (N)	Number of Statements	Highest score	Percentage Result	Qualification
Small Group	580	15	9	5	85.9%	Good
Large Group	5711	149	9	5	85.2%	Good

Discussion

The results of the study show that the development of video-based learning media for massage courses in the Sports Education Study Program, Faculty of Sports Sciences, Padang State University, has been successful. Validation from material experts obtained a score of 88.33% with the category "Good," indicating that the content of the material was in accordance with academic standards and learning relevance. Meanwhile, validation from media experts recorded a score of 94.54% with the category of "Very Good," indicating that the design and technical quality of the media met high standards and was effective. The practicality test also showed positive results, with a percentage of 85.9% in the small group and 85.2% in the large group, both in the "Good" category. This shows that this learning medium is well received by students and is considered useful and easy to use. With good assessments from material and media experts and positive responses from students, this medium is expected to improve students' understanding and skills in massage techniques effectively (Khan et al., 2017; Raibowo & Nopiyanto, 2020; Sudarko et al., 2023). Further improvements may not be necessary, but additional monitoring and feedback remain important to ensure these media continue to meet educational needs.

The validation carried out shows that this video product is in accordance with the Semester Learning Plan of the massage course, and the material presented in the video is systematically arranged. This is in line with research which emphasizes that the suitability of the material with the learning objectives facilitates the understanding of basic concepts by students (Safitri et al., 2023). Then according other study the delivery of clear and systematic material in learning videos can play an important role in achieving learning goals (Afify, 2020). In the practical trial stage, the learning video media showed good results in both small and large groups. These results indicate that the video media can be used effectively in various learning settings, both online and onlineg. Other study suggests that video media allows students to learn independently anytime and anywhere, supporting this finding that learning videos offer flexibility in the learning process (Sablić et al., 2021).

The color suitability, layout, and clarity of the audio are also carefully considered (Alnedral et al., 2023; Lanos et al., 2023; Mahfud et al., 2022). Then with the use of animation and visual effects in learning videos, it aims to increase students' interest and attention (Barman & Jena, 2023; Jiang & Ning, 2023; Mackenbrock & Kleinert, 2023). This is in accordance with the results of research shows that visual effects can attract students' attention and increase their engagement in the learning process (Sablić et al., 2021). Providing engaging visuals and transition effects helps keep students engaged and avoid boredom, as well as making it easier to understand the material (Lange & Costley, 2020; Salve et al., 2022; Sattar et al., 2020). From the results of this study, it can be concluded that the video learning media products developed meet the eligibility criteria in terms of material, design, and practicality. This media supports more structured and effective learning by presenting material systematically and clearly. The flexibility of using video media in various learning settings increases the accessibility and independence of students in the learning process. With the application of good learning design principles, the use of clear language, and the integration of interesting visual elements can increase the effectiveness of learning media.

Overall, this video learning media product not only meets the validation criteria from experts but also shows practicality and good design quality in small and large group testing. These findings support the existing literature on the importance of material appropriateness, effective visual design, and flexible use of media in supporting the learning process. Further research can explore the specific influence of various elements of video design on student learning outcomes to provide deeper insights into the optimization of video-based learning media.

The results emphasize the value of incorporating video-based learning tools in education. Such tools offer flexibility, allowing students to access and review material at their own pace, which supports independent learning and reinforces their understanding. The integration of visual and auditory elements into the learning media makes it easier for students to grasp complex concepts and maintain their interest throughout the course. Overall, the research demonstrates that the development and implementation of

video-based learning media can substantially improve educational outcomes by providing a structured, clear, and engaging way to deliver course content. This approach not only meets the immediate educational needs but also supports long-term learning by accommodating different learning styles and preferences.

4. CONCLUSION

The research highlights the significant impact of developing and validating video-based learning media for massage courses in sports education. The validation process demonstrated that the video content aligns well with academic standards and is highly effective in delivering the necessary information. The positive evaluations from both material and media experts suggest that the learning media meets high standards of educational quality. This high level of validation indicates that the content is both relevant and accurately reflects the learning objectives, while the technical aspects, such as design and clarity, are executed effectively. The successful practicality trials further confirm that students find the media beneficial and user-friendly. This positive reception from students shows that the video media not only improves understanding but also facilitates a more engaging and interactive learning process.

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