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A Game-Based Learning Innovation in Elementary Physical Education: Development of Monopoly-Based PJOK Learning Media

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Abstrac: This study aimed to develop a Monopoly-based learning medium for Physical Education, Sports, and Health (PJOK) for Grade V elementary school students and to examine its feasibility through expert validation. The study employed a Research and Development (R&D) approach guided by the ADDIE model, encompassing needs analysis, design, development, and expert validation stages. Needs analysis revealed limited use of instructional media in PJOK learning, resulting in low student engagement and weak conceptual understanding. The developed Monopoly-based media integrated cognitive, affective, and psychomotor learning components through theory-based questions, structured movement challenges, and collaborative gameplay. Expert validation involved a PJOK subject matter expert, a learning media expert, and a senior PJOK teacher. The validation results indicated high feasibility and content validity, supported by favorable CVR and CVI values. These findings suggest that the developed learning media is pedagogically sound and suitable for further field testing.

Keyword: Physical Education, Monopoly Media, Game-Based Learning, Research and Development.

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INTRODUCTION

Physical Education, Sports, and Health (Pendidikan Jasmani, Olahraga, dan Kesehatan/PJOK) occupies a central position within elementary education as it contributes not only to students' physical development but also to their cognitive, affective, and social growth. At the primary school level, PJOK is designed to cultivate fundamental motor skills, physical fitness, healthy lifestyles, and character values through structured and enjoyable physical activities. In line with contemporary educational paradigms, physical education is no longer viewed merely as movement-based instruction but as a holistic learning domain that supports lifelong physical literacy and well-being (Whitehead, 2019; Mustafa & Dwiyogo, 2020). Through PJOK, students are expected to develop self-confidence, cooperation, discipline, and responsibility while actively engaging in meaningful physical experiences.

Despite its strategic role, the implementation of PJOK in elementary schools continues to face substantial pedagogical challenges. Several studies have reported that PJOK instruction often remains dominated by conventional, teacher-centered approaches with limited use of innovative learning media, resulting in low student engagement and suboptimal learning outcomes (Saputra I Wayan Raka, 2022; Yustiyati et al., 2024). This condition is particularly problematic in the context of theoretical PJOK content, where abstract concepts such as rules of games, principles of movement, and health-related knowledge are frequently delivered through verbal explanation alone. As a result, students struggle to connect theoretical understanding with physical practice, leading to fragmented learning experiences and limited long-term retention (I Wayan Aditya Kurnia Wijaya & Dartini, 2023).

Empirical observations in elementary schools further confirm that many Grade V students exhibit low enthusiasm during PJOK lessons, especially when learning activities emphasize explanation rather than participation. Students' theoretical assessment scores tend to be relatively low, while practical performance often only meets minimum competency standards without demonstrating conceptual mastery. These findings align with previous research indicating that the lack of engaging instructional media and variation in teaching strategies reduces students' motivation, participation, and comprehension in PJOK learning (Faradila et al., 2024; Ningsih, 2024). Consequently, PJOK learning risks being perceived as repetitive, monotonous, and disconnected from students' lived experiences.

One of the major pedagogical issues underlying this situation is the limited integration of learning media that can bridge theory and practice in PJOK. Many teachers continue to rely heavily on direct instruction and routine physical drills without sufficient contextualization or cognitive reinforcement. According to constructivist learning theory, elementary school students particularly those aged 9–11 years are in the concrete operational stage and require tangible, experience-based learning to grasp abstract concepts effectively (Piaget, as cited in Rosiana et al., 2023). When learning activities fail to provide concrete representations and meaningful interaction, students' understanding remains superficial, and their motivation declines.

In response to these challenges, game-based learning has emerged as a promising pedagogical approach in physical education. Educational games are widely recognized for their ability to foster intrinsic motivation, active participation, social interaction, and experiential learning (Madhumathi & Selvam, 2021; Garwan et al., 2023). In PJOK contexts, games not only facilitate motor skill development but also support cognitive processes such as decision-making, strategy formulation, and problem-solving, as well as affective outcomes such as cooperation and sportsmanship (Marmaini et al., 2023; Straub et al., 2023). By embedding learning objectives within playful and competitive activities, game-based learning aligns closely with the developmental characteristics and learning preferences of elementary school students.

Among various game-based approaches, board games have attracted increasing attention due to their flexibility, familiarity, and adaptability to different learning contents. Monopoly, in particular, has been widely used as an educational medium across subjects such as social studies, civic education, science, and health education (Trinovitasari, 2015; Anggraini & Kristin, 2022; Marini & Silalahi, 2022). Prior studies have demonstrated that Monopoly-based learning media can significantly enhance students' motivation, engagement, and conceptual understanding by combining structured rules, strategic thinking, and collaborative interaction (Ulfaeni, 2017;

Rahmadani et al., 2023). These findings suggest that Monopoly has strong pedagogical potential as a contextual and interactive learning medium (Hambali et al., 2024).

In the field of PJOK, several studies have explored the use of games and modified traditional games to enhance learning outcomes. For instance, Trinovitasari (2015) and Hayudi and Mursalim (2020) reported positive effects of game-based learning on students' motivation and participation in physical education. Similarly, Kurniawati (2021) found that Monopoly-based instructional media improved students' learning achievement in civic education, indicating its broader applicability across domains. However, most existing PJOK-related studies focus either on traditional physical games or digital learning media, with limited attention to structured board games that systematically integrate cognitive, affective, and psychomotor components.

More recent research highlights the need for PJOK learning media that are not only engaging but also aligned with contemporary curricular demands, particularly the Merdeka Curriculum. This curriculum emphasizes student-centered learning, meaningful experiences, collaboration, and the integration of character education (Kemdikbudristek, 2022; Rosiana et al., 2023). In this context, learning media are expected to promote active participation, contextual understanding, and holistic development. Board games such as Monopoly, when appropriately modified, offer opportunities to embed physical challenges, theoretical questions, and value-based learning within a single instructional framework (Putra et al., 2024; Hermawati & Lestari, 2024).

Nevertheless, a critical gap remains in the existing literature. While several studies have successfully adapted Monopoly for cognitive learning objectives, such as improving conceptual understanding and motivation, few have systematically incorporated psychomotor activities that are essential to PJOK learning (Badriyah et al., 2024; Rustianti & Asih, 2025). Moreover, previous research often prioritizes digital adaptations, which may not be feasible in schools with limited technological resources (Fitria Surya & Maisaroh, 2022). There is still a lack of empirically tested instructional media that utilize a physical board-game format to integrate movement-based challenges, theoretical PJOK content, and character education simultaneously.

Addressing this gap requires the development of a learning medium that is pedagogically sound, contextually relevant, and practically applicable in elementary school settings. The Monopoly game, due to its structured mechanics, adaptability, and familiarity among students, provides a strong foundation for such innovation. By embedding PJOK materials—such as basic motor skills, physical fitness concepts, health education, and sportsmanship values—into Monopoly game components, learning can be transformed into an interactive and meaningful experience that aligns with students' developmental needs and curricular expectations (Aulia et al., 2024; Azhar et al., 2025).

Based on these considerations, the present study aims to develop and evaluate a Monopoly-based PJOK learning medium for Grade V elementary school students using a research and development (R&D) approach grounded in the ADDIE model (Sugiyono, 2020; Hidayat & Nizar, 2021). The novelty of this study lies in its integration of cognitive, affective, and psychomotor domains within a single board-game medium specifically designed for PJOK learning under the Merdeka Curriculum framework. Unlike previous studies that focus primarily on cognitive outcomes or digital platforms, this study emphasizes physical activity, movement challenges, and social interaction as core learning elements. The scope of the study includes product development, expert validation, small- and large-scale field testing, and effectiveness evaluation through pretest–posttest design. Through this approach, the study seeks to provide empirical evidence on the feasibility and effectiveness of Monopoly-based learning media in enhancing PJOK learning quality at the elementary level.

METHOD

Research Design and Approach

This study employed a Research and Development (R&D) methodology aimed at producing and validating an instructional product in the form of a Monopoly-based learning medium for Physical Education, Sports, and Health (PJOK) for Grade V elementary school students. Research and Development is an approach that integrates systematic inquiry with

product creation to generate educational innovations that are empirically grounded and pedagogically feasible (Sugiyono, 2020; Okpatrioka, 2023). In educational contexts, R&D is particularly relevant when the primary objective is not merely to test hypotheses, but to design, refine, and validate learning media that respond to real instructional needs (Borg & Gall, as cited in Sugiyono, 2020). The development process in this study was guided by the ADDIE instructional design model, which consists of five interconnected stages: Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model was selected due to its systematic, iterative, and flexible structure, which allows continuous refinement based on empirical feedback (Tegeh & Kirna, 2013; Hidayat & Nizar, 2021). In line with the scope of this chapter, the methodological description focuses exclusively on the stages from needs analysis through expert validation within the development phase. This is because the main focus of this research is to find out the initial views and initial feasibility of the developed model from the experts' point of view, before it is directly implemented.

Development Model Framework

The ADDIE model provides a conceptual and procedural framework to ensure that instructional media development is aligned with learners' needs, curricular demands, and pedagogical principles. Unlike linear development models, ADDIE allows revisions at each stage, thereby enhancing product quality and relevance (Cahyadi, 2019; Senoaji et al., n.d.). In the context of PJOK learning, the ADDIE framework supports the integration of movement-based activities, cognitive reinforcement, and affective learning outcomes in a coherent instructional design (Latip, 2022; Tuban et al., 2022). Within this study, the ADDIE model functioned not only as a technical guide but also as a pedagogical safeguard to ensure that the developed Monopoly-based media was age-appropriate, curriculum-aligned, and feasible for classroom implementation in elementary schools.

Analysis Stage (Needs Assessment)

The analysis stage constituted the foundational phase of the development process and aimed to identify instructional gaps, learner characteristics, and contextual constraints in PJOK learning at the elementary level. Needs analysis was conducted through classroom observations, informal interviews with PJOK teachers, and document review of Grade V PJOK learning materials aligned with the Merdeka Curriculum. According to Latip (2022), a comprehensive needs analysis is essential to ensure that developed media are relevant, contextual, and responsive to actual classroom conditions. Findings from this stage indicated that PJOK instruction in the observed schools was predominantly teacher-centered, relied heavily on verbal explanation, and made limited use of instructional media. Students demonstrated low enthusiasm during theory-oriented PJOK lessons and experienced difficulties in understanding abstract concepts such as combinations of basic movements in ball games. These findings are consistent with previous studies highlighting that insufficient instructional media and limited pedagogical variation negatively affect student motivation and comprehension in PJOK learning (Saputra I Wayan Raka, 2022; Yustiyati et al., 2024).

Additionally, the analysis stage considered learner characteristics, particularly the developmental stage of Grade V students, who are situated in the concrete operational phase and require tangible, experience-based learning (Rosiana et al., 2023). These considerations reinforced the need for a learning medium that combines physical activity, cognitive engagement, and social interaction within a structured and enjoyable format.

Design Stage

Based on the findings of the needs analysis, the design stage focused on formulating the conceptual and technical specifications of the Monopoly-based PJOK learning media. At this stage, the instructional objectives, content structure, game mechanics, and assessment components were systematically outlined. The design process aimed to ensure alignment between PJOK learning outcomes, game elements, and students' developmental characteristics. The Monopoly board game was selected as the core instructional medium due to its familiarity, adaptability, and strategic structure, which supports both individual and collaborative learning (Sujia Aprisari & Romadon, 2023; Putra et al., 2024). The game design incorporated PJOK content such as basic motor skills, physical fitness concepts, health education, and character values. To minimize

cognitive overload and ensure clarity, the design adhered to principles of cognitive load theory and multimedia learning, emphasizing simplicity, visual clarity, and instructional coherence (Sweller et al., 2019; Mayer, 2022). During this stage, initial storyboards, game rules, card contents, and visual layouts were developed. The design also included the preparation of supporting materials, such as user guidelines for teachers and students, to facilitate correct and effective use of the media in instructional settings.

Development Stage

The development stage involved translating the design blueprint into a tangible instructional product. This process included producing the physical components of the Monopoly-based PJOK media, such as the game board, player tokens, dice, question cards, and movement challenge cards. The development phase emphasized material durability, safety, and usability to ensure that the product was suitable for repeated use by elementary school students (Cahyadi, 2019; Amaliawati et al., 2024). At this stage, iterative revisions were conducted based on internal review to ensure consistency between instructional objectives and game mechanics. The development process also ensured that the media integrated cognitive, affective, and psychomotor learning domains in accordance with PJOK pedagogical principles (Mustafa & Dwiyogo, 2020).

Expert Validation and Data Analysis

Expert validation constituted a critical component of the development stage and was conducted to assess the content validity, media quality, and pedagogical feasibility of the developed Monopoly-based PJOK learning media. Validation involved three categories of experts: a PJOK subject matter expert, a learning media expert, and a senior PJOK practitioner. According to Sugiyono (2020), expert validation is essential in R&D studies to ensure that educational products meet academic standards and instructional requirements prior to field implementation. The validation process utilized structured evaluation instruments covering aspects of content accuracy, curriculum alignment, instructional clarity, visual design, usability, and safety. Experts were asked to evaluate the relevance and appropriateness of the media for Grade V PJOK learning and to provide qualitative feedback for improvement. The validation results were analyzed using descriptive quantitative methods, supported by qualitative comments and suggestions. Content Validity Index (CVI) and Content Validity Ratio (CVR) analyses were employed to determine the degree of expert agreement on each evaluation item, following established validation procedures (Anas Sudijono, 2017; Mariam et al., 2020). The validation outcomes indicated that the Monopoly-based PJOK learning media met the criteria for validity and feasibility, with minor revisions recommended to enhance clarity, variation of movement challenges, and visual balance. Revisions based on expert feedback were incorporated to refine the product before proceeding to subsequent stages of testing and evaluation, which fall outside the scope of this methodological description.

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RESULT

This chapter reports the results of the development process of the Monopoly-based learning media for Physical Education, Sports, and Health (PJOK) for Grade V elementary school students. In accordance with the research scope, the findings presented are limited to the stages of needs analysis, product realization, and expert validation. The results are organized to demonstrate the empirical basis for determining the feasibility and validity of the developed media prior to field implementation.

Analysis Phase

The results of the needs analysis stage indicated several instructional challenges in PJOK learning at the elementary level. Classroom observations and teacher interviews revealed that PJOK instruction was predominantly delivered through conventional methods with minimal use of instructional media. Theoretical components of PJOK, particularly those related to combinations of basic movements in ball games, were often presented verbally without adequate visual or experiential support. As a result, students showed low enthusiasm, limited engagement, and difficulties in understanding abstract PJOK concepts. Teachers also reported that students'

theoretical achievement in PJOK was relatively low, while practical performance merely met minimum competency standards. These findings reinforce earlier research emphasizing that insufficient use of learning media reduces motivation and conceptual understanding in PJOK learning (Saputra I Wayan Raka, 2022; Yustiyati et al., 2024).

Design Phase

Based on the identified needs, the product design was realized in the form of a Monopoly-based PJOK learning medium. The developed media consisted of a large-format Monopoly game board adapted to PJOK content, complemented by question cards containing theoretical PJOK material and movement challenge cards requiring students to perform structured physical activities. The design emphasized integration across cognitive, affective, and psychomotor domains, ensuring that students learned through thinking, moving, and social interaction simultaneously. The physical format of the game was intentionally selected to provide concrete learning experiences consistent with the developmental characteristics of Grade V students (Rosiana et al., 2023).

Development Phase

Following product development, expert validation was conducted to assess the feasibility and validity of the learning media. Three experts participated in this process: a PJOK subject matter expert, a learning media expert, and a senior PJOK teacher. Each expert evaluated the product using structured instruments covering content relevance, instructional alignment, visual design, usability, and pedagogical suitability (Sugiyono, 2020). The quantitative results of expert validation are presented in Table 1.

Table 1. Summary of Expert Validation Results

Expert Category	Feasibility Percentage	Interpretation
PJOK Subject Matter Expert	87.0%	Very Feasible
Learning Media Expert	97.5%	Very Feasible
Senior PJOK Teacher	97.5%	Very Feasible

The data in Table 4.1 indicate that all expert groups rated the Monopoly-based PJOK learning media as very feasible. The PJOK subject matter expert emphasized the appropriateness of the content with respect to curriculum standards and student characteristics, while the learning media expert highlighted the clarity of visual design, layout consistency, and ease of use. The senior PJOK teacher confirmed the practicality of the media for classroom application and its potential to increase student engagement.

To further assess content validity, the evaluation results were analyzed using the Content Validity Ratio (CVR) and Content Validity Index (CVI). This analysis aimed to measure the degree of expert agreement regarding the essentiality of each evaluation item (Anas Sudijono, 2017; Mariam et al., 2020). The results of the CVR and CVI analysis are summarized in Table 2.

Table 2. Results of Content Validity Analysis (CVR and CVI)

Item Range	CVR Value Range	Validity Status
Item 1 & Item 8	1.00	Valid
Items 2–7, 9–10	0.33	Valid
Average CVR/CVI	0.46	Valid

As shown in Table 2, all evaluated items met the minimum criteria for content validity. CVR values ranged from 0.33 to 1.00, indicating acceptable to strong agreement among experts regarding the relevance and essentiality of the learning media components. The average CVI value of 0.46 confirms that the product satisfies validity requirements and is suitable for instructional use. Although the overall validation outcomes were highly positive, experts provided qualitative feedback for further improvement. Recommendations included simplifying instructional text on certain cards to enhance readability for elementary students, increasing the variation of physical

challenges to maintain engagement, and adjusting color composition on the game board to reduce potential visual distraction. These suggestions were used as formative input to refine the product before proceeding to subsequent testing stages.

In summary, the results up to the expert validation stage demonstrate that the Monopoly-based PJOK learning media was developed in direct response to instructional needs and achieved a high level of feasibility and content validity. Expert evaluations confirmed that the media is pedagogically sound, curriculum-aligned, visually appropriate, and practical for Grade V PJOK learning. These findings provide a strong empirical foundation for continuing the development process into field testing and effectiveness evaluation, which are addressed beyond the scope of the present chapter.

DISCUSSION

The purpose of this study was to develop a Monopoly-based learning medium for Physical Education, Sports, and Health (PJOK) for Grade V elementary school students and to examine its feasibility through expert validation. The discussion presented in this chapter focuses on interpreting the findings obtained up to the expert validation stage and situates these findings within the context of relevant theoretical and empirical literature. The results of the needs analysis confirm that PJOK learning in elementary schools continues to encounter persistent pedagogical challenges, particularly in the delivery of theoretical content. Consistent with earlier studies, the findings indicate that PJOK instruction remains largely teacher-centered and relies heavily on verbal explanation, resulting in low student engagement and limited conceptual understanding (Saputra I Wayan Raka, 2022; Yustiyati et al., 2024). This condition underscores the importance of developing instructional media that can transform abstract PJOK concepts into concrete, meaningful learning experiences aligned with students' developmental stages. According to constructivist learning theory, elementary school students require direct interaction with learning materials to effectively construct knowledge, especially when learning involves movement and physical coordination (Rosiana et al., 2023).

The development of a Monopoly-based PJOK learning medium represents a pedagogical response to these challenges (Hambali et al., 2024). The high feasibility ratings provided by experts indicate that the developed product successfully integrates curriculum-aligned content, appropriate instructional design, and user-friendly media features. The PJOK subject matter expert's evaluation demonstrates that the content embedded within the game aligns well with learning objectives and competencies specified in the Merdeka Curriculum. This finding supports previous research emphasizing that instructional media must be closely aligned with curriculum standards to ensure relevance and instructional coherence (Mustafa & Dwiyogo, 2020; Kemdikbudristek, 2022).

The learning media expert's high feasibility assessment further suggests that the visual design, layout, and structural organization of the Monopoly-based media adhere to principles of effective instructional design. According to multimedia learning theory, instructional media that combine visual clarity, concise text, and meaningful interaction can enhance learners' cognitive processing and reduce extraneous cognitive load (Mayer, 2022; Sweller et al., 2019). The positive evaluation of the media's visual and functional aspects indicates that the design successfully supports comprehension rather than distracting learners, which is particularly important for elementary school students.

Similarly, the senior PJOK teacher's evaluation highlights the practical applicability of the media in real classroom settings. This finding is significant because the effectiveness of instructional innovations in PJOK is strongly influenced by their practicality and adaptability to existing school conditions (Maulana et al., 2024; Teronika et al., 2024). Media that are perceived as complex or time-consuming are less likely to be adopted by teachers. The high feasibility rating from a practitioner perspective suggests that the Monopoly-based PJOK media has strong potential for classroom integration. The results of the CVR and CVI analyses further reinforce the validity of the developed product. Acceptable to high CVR values indicate substantial agreement among experts regarding the essentiality of the media components. This finding aligns with validation studies in educational research that emphasize the importance of expert consensus in

establishing content validity for newly developed instructional products (Anas Sudijono, 2017; Mariam et al., 2020). The validation outcomes suggest that the learning objectives, game mechanics, and instructional tasks embedded within the Monopoly-based media are appropriate and relevant for Grade V PJOK learning.

The experts' qualitative feedback, although minor in nature, provides important insight into the iterative nature of instructional media development. Suggestions such as simplifying textual instructions, increasing variation in movement challenges, and refining color composition reflect common considerations in developing learning media for young learners. Similar recommendations have been reported in prior studies on board game–based learning media, which emphasize readability, variation, and visual balance as critical factors influencing student engagement and learning effectiveness (Anggraini & Kristin, 2022; Hermawati & Lestari, 2024). From a theoretical perspective, the positive validation results support the premise that game-based learning media, particularly board games, can serve as effective instructional tools in PJOK. Monopoly-based learning media provide opportunities for experiential learning, where students learn by doing, interacting, and reflecting on their actions within a structured game environment. This aligns with experiential learning theory, which posits that knowledge is constructed through concrete experience followed by reflection and application (Kolb, 2014). Moreover, the integration of physical challenges within the game supports the concept of physical literacy, which emphasizes motivation, confidence, and competence in movement as foundations for lifelong physical activity (Whitehead, 2019a).

Empirically, the findings of this study are consistent with previous research demonstrating the effectiveness of Monopoly-based or board game–based learning media in enhancing motivation and conceptual understanding. Studies by Trinovitasari (2015), Marini and Silalahi (2022), and Rahmadani et al. (2023) reported that Monopoly-based media increased student engagement and facilitated meaningful learning across different subject areas. However, unlike many prior studies that primarily focus on cognitive outcomes, the present study emphasizes the integration of cognitive, affective, and psychomotor domains, which is a core requirement of PJOK learning. This integrative approach addresses a gap in existing literature, where board game–based media are rarely designed to include structured physical activity as a central component (Badriyah et al., 2024; Rustianti & Asih, 2025).

Overall, the discussion of expert validation results indicates that the developed Monopoly-based PJOK learning media is pedagogically sound, content-valid, and practically feasible. The alignment between expert evaluations and theoretical expectations suggests that the media has strong potential to improve the quality of PJOK instruction by making learning more interactive, contextual, and student-centered. While the findings at this stage are limited to expert validation, they provide a robust foundation for subsequent field testing to examine the effectiveness of the media in improving student learning outcomes and engagement.

CONCLUSION

This study aimed to develop a Monopoly-based learning medium for Physical Education, Sports, and Health (PJOK) for Grade V elementary school students and to examine its feasibility through expert validation. Based on the findings obtained up to the expert validation stage, several important conclusions can be drawn. First, the development of the Monopoly-based PJOK learning media was grounded in clearly identified instructional needs. The needs analysis revealed persistent challenges in PJOK learning, particularly related to low student engagement, limited use of instructional media, and difficulties in understanding theoretical PJOK concepts. These challenges highlight the necessity of innovative learning media that can integrate cognitive understanding with physical activity in a meaningful and engaging manner.

Second, the developed Monopoly-based learning media demonstrates strong alignment with PJOK learning objectives and the Merdeka Curriculum. The integration of theoretical questions, structured movement challenges, and collaborative gameplay reflects a holistic approach to PJOK learning that encompasses cognitive, affective, and psychomotor domains. This integrative design supports contemporary views of physical education as a comprehensive learning experience rather than solely a movement-based activity.

Third, the results of expert validation indicate that the developed media meets high standards of feasibility and content validity. Evaluations by the PJOK subject matter expert, learning media expert, and senior PJOK teacher consistently rated the media as very feasible. The Content Validity Ratio (CVR) and Content Validity Index (CVI) analyses further confirmed that the instructional components of the media were considered relevant and essential by experts. These findings suggest that the Monopoly-based PJOK learning media is pedagogically sound, curriculum-aligned, visually appropriate, and practically applicable in elementary school settings. In conclusion, this study contributes to the field of physical education by providing an innovative, game-based instructional medium that addresses existing pedagogical gaps in elementary PJOK learning. The Monopoly-based learning media offers a promising alternative to conventional teaching approaches and has the potential to foster more engaging, contextual, and student-centered PJOK instruction. Further research is recommended to examine the effectiveness of the media through classroom implementation and to explore its adaptability across different grade levels and learning contexts.

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