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The Relationship Between Game Based Learning Media and Students' Learning Interest at the Elementary School Level

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Abstract

Learning media encompasses the various materials or tools used in the teaching-learning process to help students understand and master the subject matter. Primary education plays a crucial role in shaping students' knowledge and skills for the future. Teachers often fail to utilize engaging learning media, causing students to lose interest in learning. Game based learning is an innovation capable of boosting student interest in learning. The use of game-based learning media has garnered attention from many teachers and researchers as a creative alternative to enhance student interest and academic achievement. Educational games offer an interactive and enjoyable learning experience featuring elements such as challenges, narratives, and feedback, which are expected to increase student engagement and motivation.

Keywords: Learning Media, Learning Interest, Game Based Learning

1. Introduction

Learning media are an important component of the learning process because they can help teachers deliver instructional materials more effectively and assist students in understanding and mastering the materials being taught. Learning media can take the form of physical objects, technology, or a combination of both that are used to convey information to students. The appropriate use of learning media can increase students' interest in learning, encourage active interaction, and support learning outcomes (Hasan et al., 2021). In elementary education, the use of learning media is particularly important because students need engaging learning experiences that are appropriate to their developmental characteristics. Wulandari et al. (2023) also emphasized that learning media play an important role in supporting the teaching and learning process.

One of the problems frequently encountered in elementary education is students' low interest in learning. Learning interest is an important factor that can influence students' involvement and learning outcomes. Nurhasanah and Sobandi (2016) found that learning interest is an important determinant of students' learning outcomes. Students who have a strong interest in learning tend to pay greater attention and participate more actively in learning activities. Conversely, low learning interest may cause students to become less active and less interested in participating in the learning process. Therefore, learning activities require innovative media and approaches that can attract students' attention and encourage active participation.

One alternative that can be used to address this problem is Game-Based Learning. Game-Based Learning incorporates game elements into learning activities, allowing students to learn

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through interactive and enjoyable experiences. Educational games can provide challenges, feedback, rewards, and opportunities for active participation. Pramuditya et al. (2017) demonstrated that educational games can be developed as learning media, particularly for mathematics learning. Similarly, del Moral Pérez et al. (2018) found that Game-Based Learning could improve several learning abilities among primary school students. These findings suggest that games can be integrated into learning activities not only as entertainment but also as instructional media that support student engagement and learning.

Previous studies have provided empirical evidence regarding the potential of game-based learning media to increase students' interest and motivation. Partovi and Razavi (2019) found that Game-Based Learning affected the academic achievement motivation of elementary school students. Vidergor (2021), involving 528 elementary school students, also found that gameful experiences were associated with students' motivation and collaboration. In Indonesia, Reshmayanti et al. (2022) reported that the use of a Mission Book Game could increase the learning interest of fourth-grade elementary school students. Sarifah et al. (2022) also found that Android-based educational games could increase elementary school students' interest in learning mathematics. Furthermore, Fatma et al. (2022) examined the influence of educational games on the learning interest of fifth-grade elementary school students using a quantitative correlational approach.

Although previous studies have demonstrated the potential of game-based learning and educational games, studies have addressed different outcomes, including motivation, learning achievement, conceptual understanding, literacy, numeracy, and learning interest. Pramuditya et al. (2017) focused on mathematics educational games, while Sutarman et al. (2022) developed an educational game for learning affixes at the elementary school level. Widiana (2022) examined the impact of Game-Based Learning on learning interest and conceptual understanding in science. Ulfa et al. (2022) examined Game-Based Learning in relation to literacy and numeracy skills. These differences indicate that the relationship between game-based learning media and elementary school students' learning interest remains important to synthesize from the findings of previous studies.

Therefore, this study reviews previous literature concerning game-based learning media and elementary school students' learning interest. The novelty of this study lies in synthesizing findings from previous research to provide a broader understanding of how game-based learning media may support students' interest and engagement in learning. The study aims to examine the relationship between game-based learning media and learning interest among elementary school students. The findings are expected to provide considerations for teachers in selecting engaging learning media and to provide a basis for further empirical research on the effectiveness of game-based learning in elementary education.

2. Method

This study employed a literature review with a descriptive approach. The study aimed to examine the relationship between game-based learning media and students' learning interest at the elementary school level. The data sources consisted of relevant academic literature discussing learning media, Game-Based Learning, educational games, and students' learning interest. The literature reviewed included studies published primarily within the last ten years, with particular attention to studies involving elementary school students and game-based learning media.

The data collection process was conducted by identifying, selecting, reviewing, and examining relevant literature related to the research topic. The selected sources were organized according to several aspects, including the role of learning media in the learning process, the implementation of Game-Based Learning, the use of educational games, and students' learning interest and motivation. The literature included empirical studies and relevant academic publications that could support the research objectives.

The data were analyzed using a descriptive qualitative technique. The analysis involved examining, comparing, and synthesizing the findings presented in the selected literature. The analysis focused on identifying common findings concerning the use of game-based learning media, student engagement, learning interest, and motivation. The findings were then synthesized descriptively to determine the potential relationship between game-based learning media and elementary school students' learning interest.

3. Results and Discussion

3.1 Result

The literature review indicates that learning media play an important role in supporting students' learning processes. Appropriate learning media can make instructional materials easier to understand and can encourage students to become more actively involved in learning activities. Hasan et al. (2021) and Wulandari et al. (2023) emphasize the importance of learning media in supporting effective teaching and learning. This indicates that the selection of appropriate media is an important factor in creating an engaging learning environment.

The reviewed literature also shows that learning interest is associated with students' participation and learning outcomes. Nurhasanah and Sobandi (2016) identified learning interest as an important determinant of students' learning outcomes. This finding suggests that students' interest should be considered when designing learning activities because students who are interested in learning are more likely to pay attention and participate actively.

Furthermore, several studies demonstrate the potential of Game-Based Learning to improve students' motivation and engagement. Partovi and Razavi (2019) found that Game-Based Learning influenced academic achievement motivation among elementary school students. Vidergor (2021) also reported that elementary school students perceived gameful experiences as contributing to their motivation and collaboration. These findings indicate that game-based learning can provide learning experiences that encourage students to become more involved in the learning process.

The findings specifically related to learning interest also show positive results. Reshmayanti et al. (2022) reported an increase in the learning interest of fourth-grade elementary school students through the use of Mission Book Game. Sarifah et al. (2022) found that Android-based educational games could increase elementary school students' interest in learning mathematics. Fatma et al. (2022) also found an influence of educational games on the learning interest of fifth-grade elementary school students. These findings provide stronger support for the potential relationship between game-based learning media and students' learning interest.

Other studies demonstrate that Game-Based Learning may support additional learning outcomes. del Moral Pérez et al. (2018) found improvements in several learning abilities among primary school students following participation in a Game-Based Learning project. Ulfa et al. (2022) reported improvements in literacy and numeracy through the implementation of Game-Based Learning. Sutarman et al. (2022) demonstrated the development of educational games for elementary school learning, while Widiana (2022) reported the potential impact of Game-Based Learning on learning interest and conceptual understanding in science.

Overall, the reviewed studies consistently indicate that game-based learning media can provide interactive and engaging learning experiences. The use of challenges, feedback, game activities, and interactive tasks may encourage students to participate more actively and maintain their attention during learning. However, because the present study uses a literature review approach, the results describe patterns and findings reported in previous studies rather than establishing a statistical correlation based on original student level data.

3.2 Discussion

The results indicate that learning media can contribute to a more engaging learning environment for elementary school students. This finding is consistent with Hasan et al. (2021) and Wulandari et al. (2023), who emphasize the importance of learning media in supporting the learning process. The use of appropriate media can make instructional content more accessible and provide students with experiences that are different from conventional instruction. This may explain why learning media are considered important in maintaining students' attention and participation.

The findings concerning learning interest are also consistent with Nurhasanah and Sobandi (2016), who identified learning interest as an important determinant of learning outcomes. Interest can encourage students to focus their attention on learning activities and participate more actively. Therefore, the use of media that can attract students' attention is relevant to efforts to increase learning interest at the elementary school level.

The positive potential of Game-Based Learning can be explained by its interactive characteristics. Partovi and Razavi (2019) found that Game-Based Learning affected academic achievement motivation among elementary school students. Similarly, Vidergor (2021) found that gameful experiences were associated with motivation and collaboration among elementary school students. The presence of challenges, playfulness, interaction, and a sense of accomplishment may make students feel more involved in the learning process. Consequently, game-based activities can provide both cognitive and affective stimulation during learning.

The findings concerning learning interest provide particularly strong support for the focus of this study. Reshmayanti et al. (2022) found that Mission Book Game could increase the learning interest of fourth-grade elementary school students, while Sarifah et al. (2022) found that Android-based educational games could increase students' interest in learning mathematics. Fatma et al. (2022) also directly examined educational games and students' learning interest using a correlational quantitative approach. These findings suggest that the potential relationship between game-based learning media and learning interest is not merely theoretical but has also been investigated empirically.

The findings can also be understood from the broader characteristics of games as learning environments. Games provide challenges, rules, feedback, and opportunities for students to respond directly to learning tasks. These characteristics can create a sense of participation and accomplishment. Vidergor (2021), for example, reported that digital escape-room activities were associated with stronger gameful experiences, collaboration, and motivation among elementary school students. Thus, the motivational potential of game-based learning may arise from the combination of instructional content and interactive game elements.

However, the findings should not be interpreted to mean that all forms of game-based learning automatically increase learning interest. The effectiveness of game-based learning depends on the design of the game, the relevance of the content, the characteristics of the students, and the way the teacher integrates the game into the learning process. A game that emphasizes entertainment without clear instructional objectives may not provide the expected learning benefits. Therefore, teachers need to ensure that game elements remain aligned with learning objectives and students' developmental needs.

Overall, the literature supports the potential relationship between game-based learning media and elementary school students' learning interest. Nevertheless, the present study does not establish a statistical correlation because it is based on a literature review rather than original quantitative data. Further empirical research is therefore needed to measure the strength and significance of this relationship using appropriate instruments and statistical procedures.

4. Conclusion

Based on the literature reviewed, game-based learning media have considerable potential to support elementary school students' learning interest. Previous studies indicate that interactive educational games and Game-Based Learning can provide more engaging, enjoyable, and participatory learning experiences. The use of challenges, feedback, interaction, and game activities can encourage students to participate actively and may contribute to increased motivation and learning interest.

The findings also show that game-based learning has been associated with various positive educational outcomes, including learning interest, motivation, conceptual understanding, literacy, numeracy, and learning achievement. Therefore, game-based learning media can be considered an alternative learning medium for creating more engaging learning experiences at the elementary school level.

However, this study is limited by its literature review approach and therefore does not provide statistical evidence of a direct correlation between game-based learning media and students' learning interest. Future research should conduct empirical quantitative studies involving elementary school students and validated instruments to measure both the use of game-based learning media and students' learning interest. Future studies may also compare different types of educational games and examine how game design, learning content, and student characteristics influence learning interest.

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