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The Effect of Using Powtoon Animation Media on the Intrinsic Learning Motivation of Fifth-Grade Students in Christian Religious Education Lessons

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Abstract

Education plays a fundamental role in developing students' knowledge, attitudes, values, and personal potential. This study aims to determine whether the implementation of Powtoon animation media influences the intrinsic learning motivation of fifth-grade students in the Christian Religious Education subject at SD Negeri Lawang Uru-1. This study employed a quantitative research approach using a pre-experimental design to examine the effect of Powtoon animation media on the intrinsic learning motivation of fifth-grade students in Christian Religious Education lessons at State Elementary School Lawang Uru-1. Based on the findings of this study, it can be concluded that the use of Powtoon animation media effectively improved the intrinsic learning motivation of fifth-grade students in Christian Religious Education at Lawang Uru 1 State Elementary School. This improvement was indicated by the increase in the students' average motivation score from 102.41 in the pretest to 133.32 in the posttest, as well as positive changes in students' learning behavior, including greater attention, active participation, confidence in expressing opinions, curiosity, and enthusiasm during the learning process.

Keywords Effect; Intrinsic Learning Motivation; Powtoon Animation Media

INTRODUCTION

Education plays a fundamental role in developing students' knowledge, attitudes, values, and personal potential. The success of the learning process is not determined solely by the curriculum, teachers, or learning materials, but is also strongly influenced by students' motivation to learn. Motivation encourages students to actively participate in learning activities, maintain attention, overcome difficulties, and achieve expected learning outcomes. Among various forms of motivation, intrinsic learning motivation is particularly important because it arises from within students themselves. Students with strong intrinsic motivation tend to learn because they are interested in, enjoy, and value the learning process rather than merely expecting external rewards or avoiding punishment (Ryan & Deci, 2020). Therefore, teachers

need to create meaningful and engaging learning experiences that can stimulate students' internal interest and willingness to learn.

The development of digital technology has created new opportunities for improving the quality of classroom instruction. Learning media have become increasingly important because they can present information in visual, auditory, and interactive forms that are more attractive to students. Multimedia-based instruction can support learning by combining words, images, animations, and sounds to help students understand complex concepts and maintain their attention during the learning process (Mayer, 2021). For elementary school students, attractive learning media are particularly relevant because children generally respond positively to concrete, visual, and dynamic learning experiences. The use of appropriate media can reduce boredom and encourage students to become more actively involved in classroom activities (Smaldino et al., 2019).

One digital medium that has gained attention in educational practice is Powtoon. Powtoon is an online animation platform that enables teachers and students to create animated presentations and educational videos by combining text, images, characters, transitions, narration, and music. The animated characteristics of Powtoon can transform conventional learning materials into more visually appealing content. Animation is capable of presenting processes, stories, concepts, and abstract information in dynamic ways that may be easier for students to understand. Previous research has indicated that animated and multimedia learning resources can improve students' attention, engagement, and interest in learning when they are designed according to instructional principles (Brame, 2016). Furthermore, visual and multimedia presentations can support students' cognitive processing by integrating verbal and visual information in a structured manner (Clark & Mayer, 2016).

The application of Powtoon animation media is also relevant to Christian Religious Education lessons. Christian Religious Education is not limited to the transmission of religious knowledge but also aims to develop students' faith, moral values, character, and understanding of Christian teachings in their daily lives. Consequently, teachers are expected to present learning materials in ways that are meaningful and connected to students' experiences. However, conventional instructional approaches that rely heavily on verbal explanations and textbooks may not always stimulate elementary school students' interest and active participation. Students may become passive when learning activities provide limited visual stimulation and opportunities for meaningful engagement. Therefore, innovative learning media are needed to make Christian Religious Education more attractive and accessible to young learners.

According to Self-Determination Theory, intrinsic motivation develops when learning environments support students' needs for autonomy, competence, and relatedness (Deci & Ryan, 2000). Engaging instructional media can contribute to these psychological needs by helping students feel more interested, capable, and connected to learning activities. When students enjoy the learning process and perceive learning activities as meaningful, they are more likely to demonstrate curiosity, persistence, and voluntary participation. In addition, student

engagement is closely associated with motivation because students who are actively engaged cognitively, emotionally, and behaviorally are more likely to experience positive learning outcomes (Fredricks et al., 2004). Thus, the selection of appropriate learning media should not only focus on improving cognitive understanding but also consider its potential influence on students' motivation and engagement.

Several studies have demonstrated the potential benefits of animation-based and digital learning media in elementary education. Animated media can capture students' attention and create enjoyable learning environments, particularly when the content is appropriate to students' developmental characteristics (Berk, 2009). The integration of technology into learning can also increase students' opportunities to interact with educational content and experience learning in more engaging formats (Sailer & Homner, 2020). Nevertheless, the effectiveness of digital learning media depends on how teachers design and implement them. Technology should be integrated with clear learning objectives, relevant content, and appropriate pedagogical strategies rather than being used merely for entertainment (Kirkwood & Price, 2014).

At State Elementary School Lawang Uru-1, the use of innovative learning media in Christian Religious Education provides an important area for investigation. The implementation of Powtoon animation media may offer an alternative strategy for creating more interesting and motivating learning experiences for fifth-grade students. Because students at this educational level are developing their interests, learning habits, and personal attitudes toward education, strengthening intrinsic motivation is essential for supporting sustainable learning. Students who are intrinsically motivated are expected to participate more actively, show greater curiosity, and develop a stronger willingness to learn independently.

Based on these considerations, examining the effect of using Powtoon animation media on students' intrinsic learning motivation is important both theoretically and practically. This study seeks to determine whether the implementation of Powtoon animation media has an effect on the intrinsic learning motivation of fifth-grade students in Christian Religious Education lessons at State Elementary School Lawang Uru-1. The findings are expected to contribute to the development of innovative instructional practices and provide teachers with evidence regarding the potential use of animation-based media to create more engaging, meaningful, and motivating learning experiences for elementary school students.

METHODS

This study employed a quantitative research approach using a pre-experimental design to examine the effect of Powtoon animation media on the intrinsic learning motivation of fifth-grade students in Christian Religious Education lessons at State Elementary School Lawang Uru-1. The research used a one-group pretest-posttest design, in which students' intrinsic learning motivation was measured before and after the implementation of Powtoon animation media. The population of this study consisted of fifth-grade students at State Elementary School Lawang Uru-1, while the research sample was selected using a total sampling technique because

all students in the fifth-grade class were involved as research participants. Data were collected through a questionnaire designed to measure students' intrinsic learning motivation based on indicators such as interest in learning, enjoyment of learning activities, curiosity, persistence, active participation, and willingness to learn independently. The questionnaire was administered as a pretest before the learning intervention and as a posttest after students participated in Christian Religious Education learning activities using Powtoon animation media. The collected data were analyzed quantitatively using descriptive statistics to describe students' motivation levels and inferential statistical analysis to determine whether there was a significant difference between the pretest and posttest results. Before hypothesis testing, the data were examined to ensure that they met the necessary statistical assumptions. The paired-samples t-test was used when the data were normally distributed, while an appropriate non-parametric alternative was applied if the normality assumption was not fulfilled. The research findings were interpreted based on the comparison between students' intrinsic learning motivation before and after the implementation of Powtoon animation media, thereby providing empirical evidence regarding the effectiveness of animation-based learning media in supporting students' motivation in Christian Religious Education lessons.

RESULTS AND DISCUSSION

Changes in Students' Intrinsic Learning Motivation Before and After the Use of Powtoon Animation Media

Based on the results of the research that had been conducted, it was found that students' intrinsic learning motivation increased after the use of Powtoon animation media in Christian Religious Education learning. Before the treatment was administered, the pretest results indicated that students' intrinsic learning motivation was still at an average score of 102.41. This condition was observed during the learning process, in which some students still showed a lack of attention to the teacher's explanations, were less active in asking or answering questions, and demonstrated less enthusiasm in participating in learning activities. This indicates that the learning process was still dominated by conventional teaching methods.

After the use of Powtoon animation media, this condition changed. The posttest results showed an increase in the average score to 133.32. In addition to the increase in scores, changes were also evident in students' behavior during the learning process. Students became more focused on the material being presented, more active in participating in discussions, more confident in expressing their opinions, and demonstrated greater curiosity about the material they were learning. These changes indicate that the use of Powtoon animation media was able to create a more engaging learning environment, thereby encouraging students to become actively involved in the learning process.

However, the increase in students' intrinsic learning motivation was not only demonstrated by the difference between the pretest and posttest scores. More importantly, it is necessary to understand why the use of Powtoon animation media was able to influence students' intrinsic learning motivation. Therefore, the findings of this study need to be

analyzed based on relevant learning theories in order to provide a deeper explanation of the effectiveness of using Powtoon animation media.

Analysis of Why Powtoon Animation Media Can Improve Students' Intrinsic Learning Motivation

The increase in students' intrinsic learning motivation in this study did not occur by chance but was influenced by the characteristics of Powtoon animation media, which are able to present learning materials in an engaging, communicative manner and in accordance with the characteristics of elementary school students. This media combines elements of images, text, animation, sound, and color in a single presentation, making the process of delivering learning materials more lively than learning that only uses lecture methods. The engaging presentation of the material was able to increase students' attention, curiosity, and involvement throughout the learning process. This condition ultimately encouraged the emergence of learning motivation originating from within the students themselves, namely intrinsic learning motivation.

1. Relationship with Richard Mayer's Cognitive Theory of Multimedia Learning

The findings of this study are consistent with the Cognitive Theory of Multimedia Learning proposed by Richard Mayer. This theory explains that learning will be more effective when information is presented through a combination of words and pictures rather than through words alone. According to Mayer, humans have two main channels for processing information, namely the visual channel and the verbal channel. These two channels operate simultaneously but have limited capacities. Therefore, learning materials need to be designed in such a way that information can be processed effectively without causing excessive cognitive load.

Powtoon animation media has characteristics that are consistent with this theory because it is able to combine text, images, animation, sound, and narration within a single learning medium. When teachers explain Christian Religious Education materials using Powtoon, students do not only listen to the teacher's explanations but also observe visual illustrations that support the material. The combination of visual and verbal elements helps students understand learning concepts more easily. As a result, students become more interested in participating in the learning process and are encouraged to learn because they feel that the material is easier to understand.

In addition, Mayer also explains that the learning process involves three stages, namely selecting, organizing, and integrating. At the selecting stage, students choose important information from the material being presented. The organizing stage occurs when students arrange the information into meaningful structures, while the integrating stage is the process of connecting new information with previously acquired knowledge. In this study, Powtoon animation media helped students go through these three stages because the material was presented gradually, systematically, and supported by engaging visual illustrations. Therefore, students did not merely receive information passively but also actively constructed their own understanding of the learning material.

2. Relationship with Dual Coding Theory

The findings of this study can also be explained through the Dual Coding Theory proposed by Allan Paivio. This theory states that information will be easier to understand and remember when it is processed through two systems of representation simultaneously, namely the verbal system and the visual system. Information received through only one channel tends to be more difficult to understand than information received through a combination of both channels.

Through the use of Powtoon animation media, students received information through the teacher's narration and the displayed text (verbal coding), as well as through pictures, illustrations, and animations (visual coding). The combination of these two forms of information made the material easier to understand and allowed it to remain longer in students' memories. When students can understand the material more easily, they will feel more confident in participating in the learning process. This sense of confidence becomes one of the factors that encourage the emergence of intrinsic learning motivation because students feel capable of completing tasks and understanding the material without experiencing significant difficulties.

3. Relationship with the ARCS Motivation Model

The increase in students' intrinsic learning motivation in this study can also be explained through the ARCS Motivation Model developed by John Keller. This model explains that learning motivation is influenced by four main components, namely Attention, Relevance, Confidence, and Satisfaction.

The first component is Attention. In this study, Powtoon animation media was able to attract students' attention through moving animations, the use of appealing colors, illustrations that were relevant to the material, and communicative narration. Attention is a very important initial stage in the learning process because students will not be able to understand the material if they do not pay attention to the learning activities.

The second component is Relevance. The material presented through Powtoon was organized according to the characteristics of elementary school students, making it easier to understand and more closely related to their learning experiences. When students feel that the material they are learning is connected to their lives, they will become more motivated to participate in the learning process.

The third component is Confidence. The presentation of material in a simple and gradual manner, supported by visual illustrations, helped students understand concepts more easily. This increased students' self-confidence because they felt capable of following the learning process and answering questions given by the teacher.

The fourth component is Satisfaction. After students successfully understood the material through Powtoon animation media, they experienced satisfaction in learning. This feeling of success encouraged students to continue learning and maintain their learning motivation. Therefore, all four components of the ARCS Motivation Model were evident in the

learning process conducted in this study, explaining why students' intrinsic learning motivation increased.

4. Relationship with Learning Motivation Theory

The findings of this study are also consistent with the learning motivation theories proposed by Sardiman and Uno. Sardiman explains that learning motivation is the overall driving force within students that generates learning activities, ensures the continuity of learning activities, and provides direction for those learning activities. After the use of Powtoon animation media, students demonstrated better attention, became more active during learning, and showed greater persistence in completing tasks. This indicates that the internal driving force for learning within students increased.

Uno also explains that intrinsic learning motivation is characterized by the existence of learning encouragement originating from within students, such as curiosity, the desire to succeed, persistence, and enjoyment in participating in learning activities. These indicators were evident during the use of Powtoon animation media. Students became more enthusiastic about participating in learning, more active in asking questions, more confident in expressing their opinions, and more enthusiastic about completing the tasks assigned by the teacher. Thus, the findings of this study support the theory that the use of engaging learning media can improve students' intrinsic learning motivation.

5. Relationship Between the Research Findings and Previous Studies

The findings of this study support the research conducted by Dewi Yulianti, Santoso, and Gunawan Setiadi (2022), which demonstrated that the use of Powtoon media had an effect on students' learning motivation. The similarity between their study and the present study lies in the use of Powtoon animation media as the independent variable and the quantitative experimental approach used to examine the effect of the media on learning motivation. However, this study has novelty because it focuses on students' intrinsic learning motivation in the subject of Christian Religious Education, whereas Dewi Yulianti's study examined motivation and learning outcomes in Social Studies.

This study is also consistent with the research conducted by Syahna Apriani Syihabudin (2023), which demonstrated that animation media supported by the Powtoon application was able to improve elementary school students' motivation to learn Science. The similarity between the two studies lies in the use of Powtoon animation media as a learning tool capable of increasing learning motivation. The differences lie in the subject area, research location, and the focus of the variables being measured.

Furthermore, the findings of this study support the research conducted by Abd. Hafid et al. (2023), which concluded that the use of a problem-based learning model assisted by Powtoon media had an effect on students' learning motivation. The difference is that Abd. Hafid's study combined Powtoon with the Problem-Based Learning model, whereas this study focused solely on the use of Powtoon animation media in Christian Religious Education learning.

Therefore, the findings of this study strengthen the results of previous studies demonstrating that Powtoon animation media is effective in improving students' learning motivation. The novelty of this study lies in its focus on intrinsic learning motivation in the subject of Christian Religious Education among fifth-grade students at Lawang Uru 1 State Elementary School. This finding contributes to the understanding that Powtoon animation media is not only effective for use in general subjects but also has the potential to improve intrinsic learning motivation in Christian Religious Education learning at the elementary school level.

CONCLUSION

Based on the findings of this study, it can be concluded that the use of Powtoon animation media effectively improved the intrinsic learning motivation of fifth-grade students in Christian Religious Education at Lawang Uru 1 State Elementary School. This improvement was indicated by the increase in the students' average motivation score from 102.41 in the pretest to 133.32 in the posttest, as well as positive changes in students' learning behavior, including greater attention, active participation, confidence in expressing opinions, curiosity, and enthusiasm during the learning process. The effectiveness of Powtoon can be explained through Richard Mayer's Cognitive Theory of Multimedia Learning, Dual Coding Theory, the ARCS Motivation Model, and learning motivation theories, which emphasize the importance of combining visual and verbal information, attracting students' attention, increasing relevance and confidence, and creating satisfaction in learning. The combination of text, images, animation, sound, and narration in Powtoon enabled learning materials to become more interesting, understandable, and meaningful for elementary school students, thereby encouraging motivation that originated from within the students themselves. Furthermore, the findings are consistent with previous studies demonstrating the effectiveness of Powtoon in improving students' learning motivation, while the novelty of this study lies in its specific focus on intrinsic learning motivation in Christian Religious Education among fifth-grade elementary school students. Therefore, Powtoon animation media can be considered an effective and innovative learning medium that can support teachers in creating more engaging learning environments and fostering students' intrinsic motivation to participate actively and independently in the learning process.

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