

WhatsApp-Mediated Economics Learning and Student Learning Interest in Senior High School Education

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Abstract

The integration of digital communication technology in education has become an effective approach to enhance student engagement and learning interest. WhatsApp, as a widely used application, offers various features that support interaction, material delivery, and communication between teachers and students; however, its effectiveness in influencing students' learning interest requires empirical investigation. This study aims to examine the effect of WhatsApp usage on students' learning interest in Economics among tenth-grade students at SMA Negeri 18 Bone. The research employed a quantitative approach with an ex post facto design, involving 32 students selected through simple random sampling. Data were collected using a Likert-scale questionnaire and analyzed through simple linear regression. The results indicate that WhatsApp usage has a positive effect on students' learning interest (sig. $0.022 < 0.05$), with a moderate relationship ($R = 0.402$) and a contribution of 16.2% ($R^2 = 0.162$). In conclusion, WhatsApp can be utilized as a supportive learning medium to enhance students' learning interest, although its influence is not dominant and is affected by other factors beyond this study.

Keywords: WhatsApp, Learning Interest, Digital Learning, Economics Education, Students

1. Introduction

The development of information and communication technology has brought significant transformations to various aspects of life, including education. Integrating technology into learning is no longer an option but a necessity to improve the effectiveness of teaching and learning in the digital era. The use of technology enables more flexible interactions, broader access to information, and the development of more contextual and meaningful learning experiences (Sihombing et al., 2022; Wardani & Sandi, 2024). In this context, digital media based on communication applications is one innovation with the potential to support the achievement of learning objectives.

One of the most widely used applications in everyday life is WhatsApp, which offers easy communication through text messaging, audio, video, and discussion groups. In the educational context, WhatsApp functions not only as a communication tool but also as a learning medium that can facilitate ongoing interaction between teachers and students. The group feature allows for discussions, material delivery, and real-time feedback, creating a more interactive and collaborative learning environment (Adawiyah Robi'atul Vina et al., 2024). Furthermore, WhatsApp's flexibility, unrestricted by space and time, makes it a relevant medium for supporting technology-based learning.

Several studies have shown that the use of social media and instant messaging applications in learning can increase student engagement, facilitate communication, and support a more effective learning process (Holly et al., 2023; Sekarkedhaton et al., 2024). WhatsApp, as one of the most popular applications, has proven to be a practical and easily accessible online learning tool for various groups. However, the effectiveness of WhatsApp use in learning depends not only on the availability of the technology but also on how the medium is used pedagogically to encourage active student participation.

From a learning theory perspective, learning interest is a key factor determining the success of the educational process. Learning interest reflects an individual's tendency to feel interested, pay attention, and actively engage in learning activities without coercion (Togelang, 2021). This concept aligns with constructivism theory, which emphasizes that learning is an active process in which students construct knowledge through social interactions and meaningful learning experiences (Angglepi Mila Sebmi, et al., 2025). Therefore, the use of technology-based

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learning media such as WhatsApp has the potential to increase learning interest if it can create more intense and participatory interactions.

However, the reality on the ground shows that the use of technology in learning is not yet fully optimal. In economics lessons at the secondary school level, the learning process still tends to be dominated by conventional methods that focus on one-way delivery of material. This condition results in low student engagement in the learning process, which ultimately affects their interest in learning. Initial observations indicate that although WhatsApp has been used as a learning support medium, its use is still limited to delivering information and assignments, thus failing to encourage active and meaningful interaction among students.

These findings indicate a gap between the potential use of WhatsApp as a learning medium and its practical implementation in the field. While WhatsApp offers various features that support interactive learning, its use tends to be passive and has not been optimally integrated into learning strategies. This situation demonstrates that the mere presence of technology is not enough to improve the quality of learning; appropriate and targeted use is necessary to significantly impact student learning interest.

Previous research generally indicates that the use of WhatsApp in learning has a positive impact on student communication and engagement. However, most of these studies were conducted in specific subject contexts or at different educational levels and focused more on learning outcomes or general learning effectiveness (Achievement et al., 2023; Andini et al., 2023). Studies specifically examining the effect of WhatsApp use on student learning interest in Economics at the senior high school level, particularly in a local context like SMA Negeri 18 Bone, are still relatively limited. This indicates a research gap that needs to be filled through more contextual empirical research.

Furthermore, some previous research has shown that WhatsApp use does not always have a positive impact if not managed properly. Several obstacles, such as suboptimal interaction, pedagogical limitations, and potential distractions, can reduce the effectiveness of WhatsApp-based learning (Achievement et al., 2023). Therefore, studies are needed that not only test for the existence of an influence but also provide an empirical picture of the extent to which WhatsApp use actually contributes to increasing student learning interest.

Based on the above description, this study has a novel focus, specifically examining the influence of WhatsApp usage on students' learning interest in Economics at the high school level in a local context. This study not only examines the use of technology as a learning medium but also links it to students' affective aspects, namely learning interest, which is a crucial factor in learning success. Furthermore, this study provides an empirical contribution by using a quantitative approach to objectively measure the relationship between WhatsApp usage and students' learning interest.

Thus, this study aims to analyze the effect of using WhatsApp as a learning medium on students' learning interest in Economics in grade 10 at SMA Negeri 18 Bone. The results are expected to contribute to the development of more effective technology-based learning strategies and serve as a basis for teachers in optimally utilizing digital media to increase student learning interest.

2. Literature Review

Learning interest is an affective aspect that plays a crucial role in successful learning. Learning interest reflects a student's tendency to feel interested, pay attention, and actively participate in the learning process. The level of learning interest is influenced by internal factors such as motivation and psychological state, as well as external factors such as the learning environment and the use of learning media (Jeshica Febiwanty & Mustika, 2024; Ulfaida & Pahlevi, 2021). Therefore, selecting appropriate learning media is one strategy to increase student learning interest.

One widely used medium is WhatsApp, which offers communication features such as text messaging, audio, video, and discussion groups. In an educational context, WhatsApp can be used as a learning medium to deliver material, facilitate discussions, and provide rapid feedback (Nasution & Munandar, 2023; Sari & Safitri, 2023). The flexibility of WhatsApp allows students to learn without the constraints of space and time, potentially increasing engagement in learning.

From a constructivist perspective, social interaction is a crucial factor in the learning process. WhatsApp supports

interactions between teachers and students through ongoing communication, thereby encouraging active student participation in learning (Adawiyah Robi'atul Vina et al., 2024). However, the effectiveness of WhatsApp usage depends heavily on how the medium is utilized in the learning process.

Previous research has shown that WhatsApp can improve student communication and engagement, but most of it has focused on general learning effectiveness and has not specifically examined learning interest in Economics at the high school level (Achievement et al., 2023; Titirloloby, 2023). This indicates a research gap that requires further investigation.

Based on these studies, this research offers novelty in examining the effect of WhatsApp use on students' learning interest in Economics in a more specific and contextual way. Conceptually, WhatsApp use is assumed to influence student learning interest, as demonstrated by increased interest, activeness, and engagement in learning.

3. Research Methods and Materials

This research uses a quantitative approach with a design *after the fact*. This approach aims to analyze the causal relationship between variables without providing special treatment to the research subjects. This approach was chosen because the variable of WhatsApp use as a learning medium occurs naturally in the learning process, so the researcher only observed its effect on students' learning interests.

The research was conducted at SMA Negeri 18 Bone, Bone Regency, South Sulawesi. The location was chosen based on the school's prior use of WhatsApp as a learning support medium, particularly in Economics, making it relevant to the research objectives.

The population in this study was all 155 students of class X at SMA Negeri 18 Bone. The research sample was determined using a probability sampling technique with a simple random sampling method, so that each member of the population had an equal chance of being selected. Based on this technique, a sample of 32 students was obtained, which was considered representative to describe the characteristics of the population.

This study involved two variables: WhatsApp usage as the independent variable (X) and student learning interest as the dependent variable (Y). WhatsApp usage was measured using several indicators, including frequency of use, material delivery, learning discussions, and assignments. Meanwhile, student learning interest was measured using indicators such as enjoyment, interest, activeness, and willingness to learn.

The research instrument used was a closed-ended questionnaire with a five-level Likert scale, designed to measure students' perceptions of WhatsApp use and their level of learning interest. The scale ranged from strongly disagree to strongly agree, allowing the data to be converted into quantitative form for statistical analysis.

Before use, the research instruments were tested for validity and reliability. Validity testing was conducted using the Pearson Product Moment correlation between item scores and the total score. An item was declared valid if the correlation coefficient was greater than the table *r* value at a significance level of 5%. Meanwhile, reliability testing was conducted using the coefficient *Cronbach's Alpha* to measure the internal consistency of the instrument. The instrument is declared reliable if the value *Cronbach's Alpha* is greater than 0.60.

The research procedure was carried out in several stages: preparation, implementation, data collection, and data analysis. During the preparation stage, the researcher developed the research instruments and conducted instrument feasibility tests. The implementation stage involved collecting data by distributing questionnaires to respondents. The collected data was then verified and processed to ensure completeness and consistency before being analyzed.

The data analysis techniques used in this study included descriptive and inferential statistical analysis. To test the research hypothesis, a simple linear regression analysis was used to determine the effect of WhatsApp use on students' learning interest. The regression equation was used to determine the direction and magnitude of the influence between variables. Furthermore, the coefficient of determination (R^2) was used to determine the extent to which the independent variables contribute to explaining variation in the dependent variable.

4. Results and Discussion

4.1 Validity Test

A validity test was conducted to determine the appropriateness of each statement item in measuring the research variables. The test results showed that all items in the WhatsApp usage and learning interest variables had correlation coefficients (calculated r) greater than the table r of 0.338 at a 5% significance level. Therefore, all statement items were declared valid and suitable for use in the research.

4.2 Reliability Test

Reliability tests were conducted to assess the internal consistency of the research instrument. The results of the analysis showed that the value Cronbach's Alpha The WhatsApp usage variable ranged from 0.707 to 0.777, while the learning interest variable ranged from 0.838 to 0.882. All values were above the minimum threshold of 0.60, indicating that the research instrument was reliable and had a good level of consistency.

4.3 Simple Linear Regression Analysis

A simple linear regression analysis was used to test the effect of WhatsApp usage on students' learning interest. The results showed that the regression equation obtained was:

$$Y = 14,587 + 0,506X$$

The regression coefficient of 0.506 indicates that every one-unit increase in WhatsApp usage will be followed by an increase in student learning interest. The significance value of 0.022, which is smaller than 0.05, indicates that the effect is significant. Furthermore, the calculated t -value of 2.407 is greater than the t -table value of 1.697, further strengthening the influence between WhatsApp usage and student learning interest.

4.4 Coefficient of Determination

The results of the coefficient of determination analysis show that the correlation coefficient (R) value is 0.402, which indicates a moderate relationship between WhatsApp use and students' learning interest. The coefficient of determination (R^2) value of 0.162 indicates that WhatsApp use contributes 16.2% to the variation in students' learning interest, while the remaining 83.8% is influenced by other factors outside the study.

4.5 Discussion

The research results show that WhatsApp usage has a positive effect on students' learning interest in Economics. This suggests that the better WhatsApp is utilized in learning, the higher students' learning interest tends to be. This can be explained by the ease with which WhatsApp delivers material, assigns assignments, and facilitates communication between teachers and students. This ease of access to information and interaction encourages more active student engagement, thereby increasing their attention, interest, and engagement in the learning process.

However, the moderate correlation and relatively limited contribution indicate that WhatsApp use is not the sole factor influencing student learning interest. Various other factors also play a role, such as learning motivation, teacher teaching methods, and the student's learning environment. This indicates that while WhatsApp plays a role in learning, its use needs to be supported by appropriate learning strategies to have a more optimal impact on student learning interest.

The findings of this study align with previous research showing that WhatsApp can enhance interaction and communication in learning. However, the impact in this study was not significant, likely due to differences in utilization methods and learning contexts. Therefore, WhatsApp is more appropriately positioned as a learning support medium. This study contributes to demonstrating the need for pedagogical integration of technology use and offers a novel focus on linking WhatsApp use with student learning interest in high school economics within a local context.

5. Conclusion

This study aims to analyze the effect of WhatsApp usage on students' learning interest in Economics. Based on the research results and discussion, it can be concluded that the use of WhatsApp as a learning medium has a positive influence on student learning interest. This indicates that the use of digital communication media can support increased student engagement in the learning process, although the resulting effect is not yet dominant.

This research contributes to providing empirical evidence on the role of WhatsApp in influencing students' affective aspects, particularly learning interest, in the context of high school economics instruction. This research also reinforces the understanding that learning technology serves not only as a tool but also as a factor that can support student engagement when used appropriately.

Practically, the results of this study imply that teachers need to optimize WhatsApp use with a more interactive and targeted approach, such as through discussion, collaboration, and continuous feedback. Utilization that goes beyond simply conveying information will be more effective in increasing student learning interest.

However, this study has limitations because it only examined one independent variable, thus failing to fully explain other factors influencing student learning interest. Furthermore, the study's limited scope, confined to a single school, also limits the generalizability of the findings.

Therefore, further research is recommended to examine other variables such as learning motivation, learning methods, and learning environment, as well as expanding the research location to obtain more comprehensive and accurate results generalizable.

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