The influence of *TikTok* usage intensity on Islamic education learning outcomes of student

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Abstract

This study was motivated by the high usage of TikTok among students, which has the potential to affect learning outcomes, particularly in Islamic Religious Education classes. The purpose of this study was to determine the relationship between the intensity of TikTok usage and PAI learning outcomes among 10th grade students at SMKN 3 Salatiga. This study employs a quantitative approach using a correlational survey method. A sample of 96 students was selected using purposive sampling, with criteria including active TikTok users and having received PAI grades in the current semester. Data was collected through a closed-ended questionnaire measuring the duration, frequency, and engagement of TikTok users, as well as documentation of academic performance grades. The analysis results indicate a positive correlation between the intensity of TikTok usage and PAI learning outcomes, meaning that the intensity of TikTok usage significantly influences PAI learning outcomes. This finding suggests the need for an adaptive learning approach tailored to students' digital habits to ensure that PAI content remains effectively conveyed.

Keywords: Learning Outcomes; Social Media; Islamic Religious Education; TikTok

Abstrak

Penelitian ini dilatarbelakangi oleh tingginya penggunaan TikTok di kalangan pelajar yang berpotensi memengaruhi hasil belajar, khususnya pada mata pelajaran Pendidikan Agama Islam (PAI). Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara intensitas penggunaan TikTok dan hasil belajar PAI pada siswa kelas X SMKN 3 Salatiga. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei korelasional. Sampel sebanyak 96 siswa dipilih menggunakan teknik purposive sampling, dengan kriteria pengguna aktif TikTok dan telah memperoleh nilai PAI pada semester berjalan. Data dikumpulkan melalui angket tertutup yang mengukur durasi, frekuensi, dan keterlibatan pengguna TikTok, serta dokumentasi nilai hasil belajar. Hasil analisis menunjukkan adanya hubungan positif antara intensitas penggunaan TikTok dengan hasil belajar PAI, yang berarti bahwa intensitas penggunaan TikTok berpengaruh signifikan terhadap hasil belajar PAI. Temuan ini mengindikasikan perlunya pendekatan pembelajaran yang adaptif terhadap kebiasaan digital siswa agar materi PAI tetap efektif tersampaikan.

Kata kunci: Hasil Belajar; Media Sosial; Pendidikan Agama Islam; TikTok

Introduction

Social media has now become an integral part of the lives of the younger generation, especially students, with TikTok being one of the most dominant platforms today. Based on a report by Demandsage (2025), TikTok has more than 1.5 billion monthly active users globally, with Indonesia ranking first in terms of the number of users with 157.6 million accounts. The average time spent by Indonesia TikTok users reaches 45 hours per month (Campaign Asia, 2025). In the context of education, this trend shows a shift in student learning behavior that is increasingly connected to digital content, including short videos.

Several studies have revealed that intensive use of social media has a negative impact on academic performance. Giunchiglia et al. (2018) found that the use of social media on mobile devices significantly reduced students' academic grades due to decreased focus and increased distraction. Research Pérez-Juárez (2023) also shows that digital distractions from social media are one of the obstacles to internalizing values and concentration in learning, especially in subjects that require deep reflection, such as Islamic Religious Education. A similar study by Pham et al. (2025) which examined Southeast Asian students, confirms that excessive consumption of social media disrupts learning routines and affects overall academic performance.

However, studies on the impact of social media on learning outcomes are generally still broad in scope and few have specially examined the impact of TikTok usage intensity on Islamic Religious Education learning outcomes. Most focus on social media as a whole (Facebook, Instagram, YouTube), without separating the unique characteristics of each platform (Pham Huong Anh et al., 2025). In fact, TikTok has its own uniqueness in the form of fast, massive content and a personalization algorithm that accelerates addictive behavior (Chiossi, Haliburton, Ou, Butz, & Schmidt, 2023).

In addition to the conceptual gap, this study also stands out in terms of context and research objectives. Studies related to the use of social media in PAI learning in vocational schools have noted that the use of digital platforms plays an important role in student motivation and learning effectiveness. For example, research by Siti Maimunah et al (2025) found that social media, particularly WhatsApp, Instagram, dan YouTube facilitated more engaging interactions and discussions between students and teachers at Miftahul Ulum Vocational School in Bandar Lampung, and was proven to increase motivation to learn Islamic Religious Education. However, challenges arose from uncontrolled content and teachers' ability to distinguish between valid content and hoaxes. At SMK N 1 Wonosobo, Fahmi Hidayat et al. (2024) researched the effectiveness of using

social media in PAI learning for grade XI DKV students and found that the benefits of learning, such as broad access to information, collaborative discussion, and flexibility in learning, must be balanced with content control and media supervision so as not to cause distraction.

These studies generally take vocational school students as their subjects and focus on the general role of social media in learning, rather than specific platforms or their impact on learning outcomes in Islamic Religious Education. This study is different because it focuses exclusively on the intensity of TikTok use, which has a stronger personalization algorithm, and how it relates to student learning outcomes in Islamic Religious Education in vocational schools, particularly SMKN 3 Salatiga. The context is unique because vocational high school students have academic demands based on vocational skills that require time efficiency and high concentration, so the digital impact needs to be reviewed more specifically.

Additionally, PAI subjects face unique challenges in the digital reality. PAI aims not only to transfer religious knowledge but also to shape students' character and morals. This is where the urgency lies in understanding how platforms such as TikTok, which are very popular among teenagers, can contribute positively or negatively to the achievement of PAI learning outcomes. In practice, many PAI teachers face difficulties in bridging students' interest in digital content with normative and value-based subject matter.

Theoretically, this article broadens the perspective in the literature on Islamic education and digital technology, particularly through a quantitative approach that examines the relationship between digital behavior variables (intensity of TikTok use) and religious learning outcomes. Practically, the results of this study can be used as a reference in developing learning strategies based on digital literacy, as well as strengthening the role of teachers as mentors in shaping healthy and valuable media habits. In line with Nasution's thinking (Nasution, 2024), religious education cannot be separated from the context of the times, including technological developments, because Islamic values are dynamic and relevant throughout the ages. Therefore, it is important for PAI teaching to transform and adapt to the changing learning styles of students.

This study focuses on the process of identifying and analyzing the relationship between the intensity of TikTok use and PAI learning outcomes at SMKN 3 Salatiga. This study is expected to contribute scientifically to the understanding of the relationship between students' digital behavior and academic performance in the context of religious education. In its application, the findings of this study have the potential to serve as a basis for educators and

policymakers in designing adaptive learning approaches to the challenges of the digital age.

Research Method

The type of research used is quantitative with a correlational survey data collection technique, which aims to test the relationship between the intensity of TikTok use and learning outcomes in Islamic Religious Education. The correlational method was chosen because it is able to show the direction and strength of the relationship between variables without manipulating the data experimentally (Sugiyono, 2017.).

The research was conducted at SMKN 3 Salatiga in the even semester of the 2024/2025 academic year. The subjects in this study were all 10th grade Mechatronics students, while the sample was determined using purposive sampling based on the criteria of students who actively use TikTok and have PAI scores in the current semester. From the selection results, 96 students were obtained as respondents.

The main instrument in this study was a closed questionnaire developed based on indicators of TikTok usage intensity, including daily duration, frequency of access, and types of interactive engagement. The scale used was a Likert scale with five response options. The questionnaire was tested for validity and reliability before being distributed directly to respondents. In addition, student PAI scores were obtained through documentation from subject teachers.

The data collection steps began with the preparation and validation of the questionnaire, the distribution of the questionnaire to students who met the criteria, and the recording of academic scores from official school documents. The research data were processed using SPSS software version 25. The analysis was carried out using classical assumption tests (normality, linearity, and homoscedasticity) to ensure the feasibility of the model.
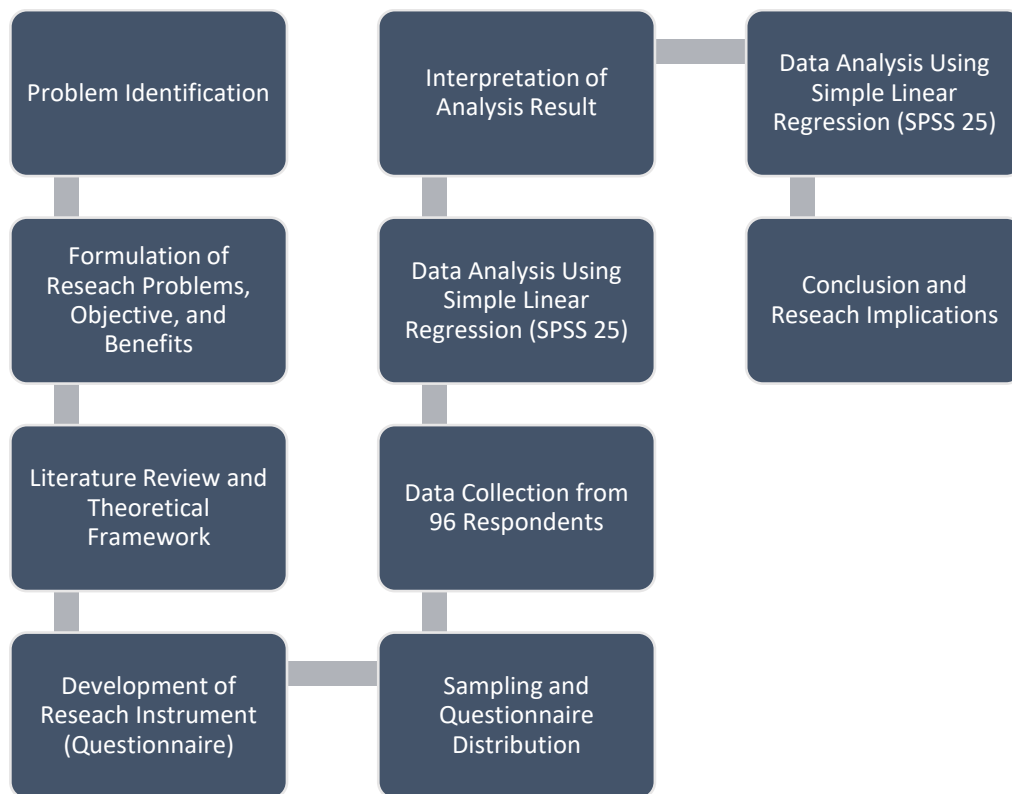
Picture 1. Reseach flow

The performance measure in this study refers to the significance of the relationship between the two main variables, namely the TikTok usage intensity score and PAI learning outcome scores. The significance criteria were determined through the significance value (p-value) at a 5% error rate.

Results and Discussion

A. Research Result

This study aims to explore the impact of TikTok usage intensity on Islamic Religious Education learning outcomes among 10th grade Mechatronics students at SMKN 3 Salatiga. Data were collected through a closed questionnaire that assessed TikTok usage intensity and documented PAI scores. The data were analyzed and processed using SPSS version 25 :

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		96
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.53510749
Most Extreme Differences	Absolute	.064
	Positive	.064
	Negative	-.037
Test Statistic		.064
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

The normality test is used to assess whether the residual data in a simple linear regression model follows a normal distribution. In this study, the Kolmogorov–Smirnov test was used, given that the number of respondents reached 96 people, which is classified as a large sample. Based on the analysis conducted with SPSS, the results of the normality test using the Kolmogorov–Smirnov method showed a significance value of 0.200, which exceeded the threshold of 0.05. Based on these results, it can be concluded that the residual distribution meets the assumption of normality. Thus, the prerequisite of normality in simple linear regression analysis has been met, allowing the analysis to proceed to the next stage.

Table 2. Heteroscedasticity Test Results (Glejser Test)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.672	.904		.743	.459
	TIKTOK	.024	.038	.064	.623	.535

a. Dependent Variable: abs_res

The heteroscedasticity test aims to identify whether there are differences in variance (heteroscedasticity) in the linear regression model. In this study, the Glejser method was applied, and the test was conducted by regressing the absolute residual values on the independent variables. The analysis results show that the significance value is 0.535, which exceeds the significance level of 0.05. This indicates that there are no signs of heteroscedasticity in the simple linear regression model. Thus, the residual variance can be considered constant (homoscedastic), and the regression assumption of homoscedasticity has been fulfilled.

Table 3. Simple Linear Regression Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.756	1.529		8.344	.000
	TIKTOK	.524	.064	.644	8.169	.000

a. Dependent Variable: HASIL

Simple linear regression equation: Y = 12.756 (a) + 0.524 (x) + e

Based on the simple linear regression equation mentioned above, it can be concluded that there is a positive effect of TikTok usage intensity on Islamic Religious Education learning outcomes. This can be seen from the regression coefficient value of 0.524, which indicates that every 1-unit increase in TikTok usage intensity will contribute to a 0.524-point increase in Islamic Religious Education learning outcomes, assuming other variables remain constant. On the other hand, the constant value of 12.756 indicates that if there is no TikTok usage (X = 0), then the PAI learning outcomes are estimated to be 12.756.

Table 4. Hypothesis Testing

Coefficients[a]

| Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.756	1.529		8.344	.000
	TIKTOK	.524	.064	.644	8.169	.000

a.   Dependent Variable: HASIL

The t-test results show a significance value of 0.000 (< 0.05) and a t-count value of 8.169, which is greater than the t-table value of 1.985. Based on these results, the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_1) indicate that there is a significant effect between the intensity of TikTok use and PAI learning outcomes.

Table 5. Coefficient of Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644[a]	.415	.409	1.546

a.   Predictors: (Constant), TIKTOK

Based on the regression analysis results, the coefficient of determination (R Square) value obtained was 0.415. This indicates that 41.5% of the variation in Islamic Religious Education (PAI) learning outcomes can be explained by the intensity of TikTok use. Meanwhile, the remaining 58.5% is influenced by other variables outside the regression model used in this study.
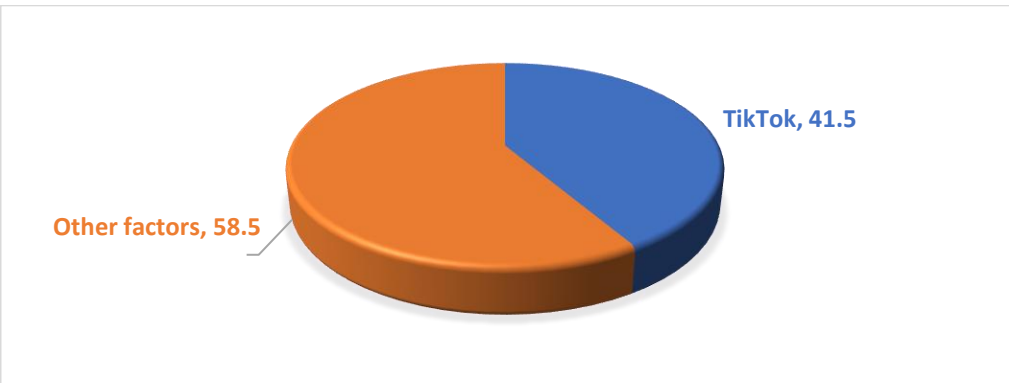
Source: Primary Data Processed by Researchers (2025)
Picture 2. Distribution of Influence on PAI Learning Outcomes

B. Discussion

The results of this study indicate that the intensity of TikTok use has a significant effect on Islamic Religious Education learning outcomes. The regression coefficient value of 0.524 indicates that increased use of TikTok correlates with improved PAI learning outcomes. This finding is quite interesting and differs from a number of previous studies that tend to highlight the negative impact of social media use on academic performance. Several studies state that intensive use of social media can reduce students' concentration and academic performance (Giunchiglia et al., 2018; Pérez-Juárez et al., 2023)

However, a literature review by Umara et al. (2023) supports this finding; social media has been proven effective as a "social learning platform" that strengthens discussion interactions, knowledge dissemination, and student engagement outside of conventional classrooms. Additionally, a study by Nur & Abdurrazzaq (Nur, 2024) concluded that when social media such as TikTok is used wisely and directed towards educational content, student motivation to learn increases through the encouragement of creativity and access to relevant information. With teacher supervision and school-parent collaboration, social media can become a learning medium that supports modern da'wah and the development of Islamic Education (PAI) materials by digital *ustadz/ustadzah*.

In Islam, time management is an essential value. Allah says in Surah Al-'Asr (1–3) :

وَٱلْعَصْرِ إِنَّ ٱلْإِنسَٰنَ لَفِى خُسْرٍ إِلَّا ٱلَّذِينَ ءَامَنُوا۟ وَعَمِلُوا۟ ٱلصَّٰلِحَٰتِ وَتَوَاصَوْا۟ بِٱلْحَقِّ وَتَوَاصَوْا۟ بِٱلصَّبْرِ

"By time. Indeed, mankind is in loss, except for those who believe and do righteous deeds and advise each other in truth and patience."

This verse emphasizes that time has high spiritual value and its use is one of the benchmarks of human fortune or misfortune. In the context of education, especially Islamic Religious Education, the use of learning time is a very important aspect. According to Adawiyah dan Fauji (Adawiyah & Fauji, 2023.), the Qur'an and Hadith explicitly emphasize the importance of good time management in the learning process. They explain that effective learning in Islam is not only assessed by its results, but also by the process that demonstrates discipline, personal responsibility, and an orientation towards the formation of Islamic character.

The use of digital media such as TikTok among students is both a challenge and an opportunity. If used carelessly and without control, TikTok can be a source of distraction that wastes time and reduces the quality of learning.

However, if directed properly, this platform can be a relevant and interesting learning medium for the younger generation. This study found that the intensity of TikTok use has a positive impact on Islamic Education learning outcomes, especially when the content accessed is educational and has Islamic values. This is in line with the principle that time spent seeking knowledge, spreading goodness, and improving religious understanding is considered a righteous deed recommended in Islam.

Thus, the use of TikTok should not be viewed as entirely negative. In fact, in the context of religious education, it can be a means of spreading Islam and strengthening Islamic values if used wisely and proportionally. Digital time management is key, and students as Muslims are required to be able to sort out activities that provide benefits in this world and the hereafter. Therefore, utilizing time in the digital age is part of the moral responsibility of a Muslim who wants to remain among those who do not lose out, as described in Surah Al-'*Ashr*. This means that it is not just the amount of time spent, but how the platform is utilized that is the important point in Islamic-based learning.

Islamic Religious Education materials not only teach ritual aspects such as worship, but also shape Islamic character and mindset. Values such as trustworthiness, responsibility, time efficiency, and ethics in social media are part of Islamic moral and social education that can be internalized through digital content (Hidayat, 2023). The use of TikTok to search for, share, or create Islamic educational content, such as short lectures, stories of the prophets, or moral values in everyday life, can be a means of preaching and self-reflection for students.

In a hadith of the Prophet SAW, it is stated, "Each of you is a leader, and each of you will be held accountable for those under your leadership" (HR. Bukhari: 7138). This hadith shows that every individual bears responsibility for their behavior and decisions in life, including in seemingly trivial daily activities, such as the use of social media. In today's digital age, platforms such as TikTok have become an integral part of the lives of teenagers, including students. They are not only consumers of information, but also producers of content that has the potential to influence others. Therefore, the use of social media cannot be separated from the principles of moral and social responsibility taught in Islam. As social media users, students have an obligation to filter information, avoid harmful content, and maintain ethics in their online interactions.

In this context, PAI teachers play an important role in guiding students to have ethical awareness in using social media. It is not enough for PAI teachers to only deliver material cognitively, but they also need to involve a learning

approach that touches on affective and applicative aspects. This means that teachers need to instill values and attitudes that can be actualized in the real behavior of students, both in the real world and in the digital world. As explained by Fauzianor (Faujianor, Nurrahmi, Haliza, Fauzi, & Anshri, 2025), PAI teachers act as moral educators, role models, and facilitators in shaping digital literacy based on religious values. Their research conducted at SMAN 6 Palangka Raya shows that PAI teachers contribute to maintaining the morals of Generation Z amid digital distractions and the dominance of social media such as TikTok. By guiding students comprehensively, PAI teachers are expected to be able to instill values of responsibility, integrity, and self-awareness that will influence the way students behave in the digital space and in their daily lives.

Thus, PAI learning in the digital age does not have to shy away from social media, but can actually utilize it to teach Islamic values in a contextual manner that touches the real world of students. Through this research, it has been proven that digital habits are not always counterproductive, but can be part of the process of forming Islamic character when directed correctly.

However, it is also important to understand that 58.5% of the variation in PAI learning outcomes is influenced by factors other than TikTok use, such as teaching methods, family background, students' intrinsic motivation, and learning environment (Pham Huong Anh et al., 2025). This means that TikTok use is not the only determining factor in learning outcomes, but rather one indicator of how students interact with digital learning resources.

In the context of Islamic education today, the use of information technology is not merely a tool, but can also be integrated with religious values through social media-based learning strategies. As explained by Hasan dan Puspika Sari (2025), social media has been proven to increase the accessibility of teaching materials, enrich teaching methods, and create interactive discussion spaces between teachers and students in Islamic education. Fujianti (Islam, 2024.) emphasizes that with a creative and contextual approach, social media can be an effective modern means of da'wah to reach the younger generation, as long as its use is managed responsibly in order to support the learning process. PAI teachers, as explained by Nasar & Umro (2020.), have a strategic role as directors and managers of online interactions, guiding students to remain ethical, filtering content, and making social media a platform for moral preaching and Islamic values in daily learning. Thus, integrating social media into PAI learning strategies not only enriches the learning experience but also serves as an effective means for responsible modern da'wah.

Theoretically, these findings support the connectivism approach in digital learning theory, which states that learning occurs through connections between digital information nodes and online social interactions (Siemens, n.d.). TikTok, as a social media platform, can be one of the "nodes" that functions as an indirect learning medium if used productively.

Thus, these results open up new opportunities for PAI teachers to consider integrating social media, particularly TikTok, into their learning strategies. For example, by creating assignments to observe Islamic content, or providing space for student presentations through social media.

Conclusion

The conclusion of this study shows that the intensity of TikTok use has a significant effect on the learning outcomes of Islamic Religious Education of students in class X Mechatronics at SMKN 3 Salatiga. This finding confirms that short video-based social media is not merely a distraction, but can contribute positively to supporting Islamic Religious Education learning if utilized appropriately. This research broadens the perspective on the role of digital technology in religious learning by showing the potential integration between students' digital habits and Islamic value-based materials. Practically, the results encourage teachers to develop learning strategies that are adaptive to students' digital culture, including the utilization of educational and creative content based on social media. Thus, TikTok can be a relevant learning and da'wah tool, as long as its use is directed wisely and in accordance with Islamic values.

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