



## Boosting Junior High School Students' Vocabulary Skills through Educational Tiktok Content

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### Abstrak

Penelitian ini bertujuan untuk menyelidiki efektivitas penggunaan TikTok sebagai media untuk meningkatkan penguasaan kosakata siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan desain kuasi-eksperimen dan dilaksanakan di SMPN 3 Lamongan pada tahun ajaran 2024/2025. Studi ini melibatkan dua kelompok: kelas 7D sebagai kelompok eksperimen (n=30) dan kelas 7G sebagai kelompok kontrol (n=30). Data dikumpulkan melalui serangkaian pre-test dan post-test untuk menilai pengetahuan kosakata siswa sebelum dan sesudah perlakuan. Kelompok eksperimen menerima pembelajaran kosakata yang diintegrasikan dengan konten TikTok, sementara kelompok kontrol menggunakan metode pembelajaran konvensional. Analisis statistik yang digunakan meliputi uji normalitas, uji Wilcoxon signed-rank, dan uji Mann-Whitney U, yang dianalisis dengan bantuan SPSS versi 25. Hasil uji Mann-Whitney U menunjukkan nilai signifikansi Asymp. Sig. (2-tailed) = 0.000, yang lebih kecil dari batas signifikansi 0.05, menunjukkan adanya perbedaan yang signifikan secara statistik antara kedua kelompok. Temuan ini mendukung hipotesis penelitian dan menunjukkan bahwa penggunaan TikTok dalam proses pembelajaran kosakata memberikan dampak positif yang signifikan terhadap penguasaan kosakata siswa. Hasil ini mengindikasikan bahwa platform media sosial seperti TikTok dapat dimanfaatkan secara efektif sebagai alat pelengkap dalam pembelajaran bahasa Inggris. Media ini mampu meningkatkan motivasi belajar serta minat siswa dalam mengikuti pembelajaran bahasa Inggris. Hasil penelitian memberikan kontribusi nyata bagi konteks pendidikan Bahasa Inggris dengan menunjukkan bahwa integrasi media sosial berbasis video pendek TikTok dapat menjadi alternatif strategi pembelajaran inovatif yang efektif untuk meningkatkan penguasaan kosakata serta keterlibatan siswa dalam proses pembelajaran.

**Keywords:** *penelitian kuantitatif, penguasaan kosakata; TikTok*

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#### Abstract

*This study aims to investigate the effectiveness of using TikTok as a medium to enhance students' vocabulary mastery. Employing a quantitative approach with a quasi-experimental design, the research was conducted at SMPN 3 Lamongan during the 2024/2025 academic year. The study involved class 7D as the experimental group (n=30) and class 7G as the control group (n=30). Data were collected through multiple-choice vocabulary tests administered as*



*pre-tests and post-tests to assess students' vocabulary knowledge before and after the treatment. The experimental group received vocabulary instruction integrated with TikTok content, while the control group followed conventional teaching methods. Statistical analyses, including normality testing, the Wilcoxon signed-rank test, and the Mann–Whitney U test, were performed using SPSS version 25. The Mann–Whitney U test yielded a significant value for Asymp. Sig. (2-tailed) = 0.000, which is lower than the threshold of 0.05, indicating a statistically significant difference between the two groups. These findings support the research hypothesis and demonstrate that incorporating TikTok into the vocabulary learning process significantly impacts students' vocabulary acquisition. The results suggest that social media platforms like TikTok can be effectively utilized as complementary tools in English language learning. This medium also enhances students' motivation, learning engagement, and interest in participating in English learning. Furthermore, the findings of this study make a meaningful contribution to the field of English education by demonstrating that the integration of short-video-based social media platforms such as TikTok can serve as an effective and innovative instructional strategy for improving students' vocabulary mastery and their engagement in the learning process.*

**Keywords:** *quantitative research, TikTok; vocabulary mastery*

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## Introduction

In the process of learning English as a foreign language, vocabulary plays a fundamental role. A sufficient vocabulary repertoire is essential for learners to effectively comprehend and express ideas across the four core language skills: listening, speaking, reading, and writing (Hajran Bakhsh Ali et al., 2025a) (Hajran Bakhsh Ali et al., 2025b). Vocabulary is the foundation upon which other linguistic components are built, and its mastery significantly influences overall language proficiency (Nation, 2025). Learners with limited vocabulary often struggle to convey meaning, engage in communication, and understand spoken or written texts, which can impede their language development (Çakıcı & Dilman, 2025; Ning, 2024). Conversely, students with a broader vocabulary base are more likely to perform better in language tasks, as vocabulary knowledge facilitates receptive and productive language use (Anistasya, 2022; Karlina & Kusnarti, 2024). Language learning becomes more challenging without sufficient vocabulary, as students cannot access or construct meaning effectively. Therefore, vocabulary acquisition should be prioritized in English language instruction to enhance learners' communicative competence.

Vocabulary learning is widely recognized as more fundamental than grammar learning in acquiring a second or foreign language. As the saying goes, "without grammar,

very little can be conveyed; without vocabulary, nothing can be conveyed." (Hu et al., 2022) emphasizing that vocabulary is the primary vehicle of meaning in communication. While grammar structures language, vocabulary enables learners to express ideas, emotions, and intentions effectively. Learners who focus on vocabulary are better equipped to understand and produce both spoken and written texts, even with limited grammatical knowledge (Yusuf & Ungku Mohd Nordin, 2025). Greater vocabulary awareness allows students to recognize the meanings of words and understand their usage in context, which is essential for communicative competence. Harmer (as cited in Teng, 2021) also asserts that while grammar can be flexible, the absence of vocabulary renders communication nearly impossible. Moreover, academic and formal language contexts often require a broader and more sophisticated vocabulary than everyday conversation, making vocabulary knowledge a key determinant of language proficiency (Flores et al., 2025; Ning, 2024). Therefore, effective vocabulary instruction should be prioritized to support learners' performance across all language skills.

Vocabulary plays a crucial role in English language acquisition; however, many Indonesian students face significant challenges in mastering English vocabulary. Several factors contribute to this issue, including a lack of engaging and supportive learning environments,

limited teacher creativity in instructional delivery, and the use of inappropriate teaching methods and media that do not align with students' needs (Ruiz et al., 2025; Saksittanupab, 2025; Zhang & Huang, 2024). Based on observations at SMPN 3 Lamongan, it was found that seventh-grade students exhibit difficulties in learning English due to limited vocabulary knowledge, challenges in memorizing new words, and a general lack of interest in the subject. These students often perceive English learning as monotonous and unimportant, hindering their motivation and progress. Moreover, it was observed that teachers tend to rely on conventional teaching methods and frequently provide direct word meanings, which can lead to student dependence and reduce opportunities for independent vocabulary acquisition. Educators must adapt their teaching styles and incorporate innovative strategies and media to enhance vocabulary learning. Appropriate and engaging media can significantly improve students' vocabulary mastery by increasing their involvement and comprehension. Utilizing digital tools, interactive media, or context-based learning strategies can provide students with more meaningful vocabulary exposure and better retention (Kuhail & Aqel, 2020; Sathyaseelan et al., 2025).

In today's rapid information technology advancement era, digital media such as the TikTok application has been recognized as significantly supporting English vocabulary learning more meaningfully and effectively. TikTok, as a short-video sharing platform that is highly popular among the younger generation both in Indonesia and globally, features characteristics such as videos ranging from 15 seconds to 3 minutes] and engaging interactive features (Alshreef & Khadawardi, 2023; Rita & Subekti, 2023). A quasi-experimental study by Usman et al. (2024) revealed that using TikTok videos significantly improved junior high school students' vocabulary mastery, with the experimental group's post-test scores increasing substantially compared to the control group (Sidabutar et al., 2024) (Usman et al., 2024). Similar findings confirmed the effectiveness of the TikTok intervention, with the experimental group exhibiting a larger effect size. The difference in this study lies in the vocabulary focus on verbs related to daily activities. The experimental group also demonstrated increased student engagement (Puspita et al., 2024).

Furthermore, surveys conducted among university students indicated that TikTok expands their vocabulary and enhances engagement and motivation in English language learning.

In the contemporary digital era, TikTok has transcended its role as a mere social media platform to become an effective pedagogical tool in educational contexts. Research indicates that TikTok's unique features such as short-form, audiovisual content facilitate flexible, multimodal learning beyond traditional temporal and spatial constraints (Putri et al., 2024). A systematic review revealed that TikTok significantly enhances learners' speaking, listening, and writing abilities by offering an engaging and interactive environment (Putri et al., 2024). Other empirical studies further support its efficacy: integrated into project-based learning, TikTok videos have significantly elevated students' motivation and speaking proficiency (Yuliasri & Faridi, 2024). Additionally, students perceive English language content on TikTok as beneficial, attributing improvements to its attractiveness, relevance, and motivational appeal (Rasyid et al., 2023). These findings suggest that TikTok is a dynamic, stimulating, and efficient medium for optimizing English language acquisition.

Several prior studies have contributed valuable insights relevant to the current research on integrating TikTok in language learning contexts. First, a study by (Alshreef & Khadawardi, 2023) explored students' perspectives on utilizing TikTok for learning English as a Foreign Language (EFL). The study employed a descriptive survey method involving 187 EFL students from King Abdulaziz University, Saudi Arabia. Using a structured questionnaire, the researchers found that most students positively perceived TikTok as an educational tool, particularly appreciating its flexibility, engagement, and audiovisual nature in supporting vocabulary acquisition and language exposure. Second, a quasi-experimental design conducted by (Maria & Sujarwati, 2025) showed that using TikTok videos significantly improved students' vocabulary. This suggests that TikTok can be an effective tool for engaging in teaching vocabulary, especially for twelfth-grade students. Third, a survey conducted online by (Rita & Subekti, 2023) the study found that most participants had very positive attitudes toward using TikTok to learn vocabulary. However, some were unsure about its effectiveness,

possibly because TikTok is mainly seen as a social media platform, not a learning tool. Based on these findings, the study recommended that teachers use TikTok in vocabulary and language skills classes, especially in the early semesters. It also discussed the study's limitations, contributions, and suggestions for future research. Although some respondents were skeptical of TikTok's pedagogical value, viewing it primarily as entertainment, the findings prompted recommendations for teachers to leverage it in introductory vocabulary and language courses. The study further outlined its limitations, contributions to digital tool adoption, and future research directions, including quasi-experimental designs like the present study to confirm effectiveness via controlled pretest and posttest comparisons.

Based on several recent studies, integrating TikTok as an educational platform has emerged as a promising approach in English language learning, particularly in vocabulary acquisition. Numerous scholars have highlighted its potential to foster student engagement and motivation through short-form, audiovisual content (Alshreef & Khadawardi, 2023; Maria & Sujarwati, 2025). While previous research has primarily explored students' perceptions and the general feasibility of TikTok in language learning, limited empirical studies have focused on measuring its direct impact on vocabulary mastery among junior high school learners.

To address this gap, the present study utilizes original TikTok content created by the researcher as a learning medium to improve students' English vocabulary. The research aims to assess the effectiveness of TikTok-based media in enhancing junior high school students' English vocabulary master through a quasi-experimental design to intact classes of junior high school students were selected: the experimental group received instruction on countable/uncountable nouns, basic adjectives, and everyday verbs via curated TikTok short videos, while the control group covered identical materials using conventional textbooks and lectures. The primary goal was to assess TikTok's effectiveness in enhancing vocabulary mastery, measured via equivalent pre- and post-tests, rather than iteratively improving through action research cycles. Specifically, this research seeks to examine the effect of TikTok on students' vocabulary mastery from a first-hand, experience-based perspective. The central research question is: Does using TikTok

significantly improve vocabulary mastery among junior high school students?

### Method

This research employed a quasi-experimental design, which is appropriate when random assignment is not feasible but experimental and control groups are still utilized for comparison purposes. Specifically, the study compared two groups of junior high school students: one group received vocabulary instruction through TikTok-based media, and the other was taught using conventional methods without digital intervention. Two groups of junior high school students participated: the experimental group received vocabulary instruction on specific topic (Daily Activities)-such as countable/uncountable nouns, everyday verbs – though curated TikTok short videos, while the control group was taught the same topics using conventional methods like textbooks and lectures without digital intervention. The primary objective was to examine the effectiveness of TikTok in enhancing students' vocabulary mastery.

Quasi-experimental designs are widely used in educational research to evaluate the impact of instructional interventions under real classroom conditions, particularly when working with pre-existing groups (Creswell & David, 2018) (Creswell & David, 2018). According to Ary et al. (2010), the design can be illustrated as follows:

Group	Pre test	Treatment	Post test
Experimental	O <sub>1</sub>	X	O <sub>2</sub>
Control	O <sub>1</sub>	-	O <sub>2</sub>

Where:

- O<sub>1</sub> = Pre-test
- X = Treatment (TikTok-based learning)
- O<sub>2</sub> = Post-test

This design enables the researcher researchers to measure the difference in vocabulary mastery before and after the intervention, and to compare outcomes between the two groups to determine the effectiveness of the TikTok application as a learning tool. This study involves two primary variables: the independent variable, which is the use of the TikTok application, and the dependent variable, which is students' vocabulary mastery. The research hypotheses are formulated as follows:

- **Ha:** TikTok usage significantly affects the vocabulary mastery of seventh-grade students at SMPN 3 Lamongan.
- **H0:** TikTok usage has no significant effect on the vocabulary mastery of seventh-grade students at SMPN 3 Lamongan.

The study was conducted at SMPN 3 Lamongan from March to May 2023-2024. The population comprised all seventh-grade students at the school. A cluster sampling technique was employed to select the sample, consisting of classes: Class 7D as the experimental group with 30 students, and Class 7G as the control group with 30 students. Cluster sampling was justified because both classes demonstrated comparable English proficiency levels, thereby controlling for confounding variables related to language ability (Creswell & David, 2018). Cluster sampling is often applied in educational research to select representative groups while maintaining internal validity efficiently. Additionally, the quasi-experimental design with control and experimental groups enables a robust investigation of the causal effect of TikTok integration on vocabulary acquisition (Usman et al., 2024; Yuliasri & Faridi, 2024).

This study employed a multiple-choice vocabulary test as its research instrument, administered in two stages: a pre-test and a post-test. A multiple-choice vocabulary test consisting of 30 questions was administered as both pre-test and post-test to measure targeted topics like countable/uncountable nouns, and everyday verbs. The pre-test was conducted to assess students' initial vocabulary proficiency, followed by a three-session treatment for the experimental group, in which students engaged with TikTok videos created by the researcher and responded using the Duet feature to reinforce vocabulary retention. The experimental group watched 8-10 curated TikTok videos on countable/uncountable noun and daily activity verbs. In contrast, the control group received instruction through conventional methods – textbook readings without digital media integration. After the treatment, both groups took a post-test to evaluate the impact of the intervention.

To analyze the data, this study applied quantitative statistical analysis using SPSS, version 25 including a normality test (Kolmogorov-Smirnov), a homogeneity test, and hypothesis testing via the Mann-Whitney U test—an appropriate non-parametric test when

data are not normally distributed or homogeneous (Usman et al., 2024). The Mann-Whitney test was used to identify significant differences in vocabulary mastery between the control and experimental groups. A result of  $p < 0.05$  indicated a statistically significant effect of TikTok-based instruction on vocabulary acquisition.

## Results and Discussion

This chapter presents the research findings and a detailed discussion regarding using educational TikTok content to improve vocabulary skills among junior high school students. The data were collected through pre-tests and post-tests administered to the experimental and control groups. The results are analyzed to determine the effectiveness of the TikTok-based instructional intervention in enhancing students' vocabulary mastery. Furthermore, statistical analyses, including descriptive statistics and non-parametric tests, are employed to support the interpretation of the findings. This chapter also compares the results with previous studies to better understand how short-form digital media can influence language learning outcomes in the EFL (English as a Foreign Language) context.

The participants in this study consisted of 60 seventh-grade students from SMPN 3 Lamongan. The sample was divided into two groups: Class 7D, comprising 30 students, served as the experimental group, while Class 7G, also consisting of 30 students, functioned as the control group. The experimental group showed substantial improvement, with post-test scores ranging from 55-100 (range=45) to pre-test scores of 20-85 (range=65). This narrower range and higher minimum (55 vs 20) indicate TikTok effectiveness in elevating floor performance on countable/uncountable nouns, and daily activity verbs. The control group exhibited modest gains, with post-test scores spanning 15-90 (range=75) versus pre-test 10-85 (range=75). The persistent wide range and low minimum (15) suggest conventional methods yielded less consistent vocabulary mastery. These intact classes were selected based on cluster sampling, considering that both groups demonstrated comparable English proficiency levels before the intervention. The descriptive statistics in Table 1 present an overview of students' vocabulary mastery in both the experimental and control groups, assessed through pre-tests and post-tests.

**Table 1.1 Descriptive Statistics**

Statistic	Pre-Test (Exp)	Post-Test (Exp)	Pre-Test (Ctrl)	Post-Test (Ctrl)
N (Sample Size)	30	30	30	30
Range	65	45	75	75
Minimum Score	20	55	10	15
Maximum Score	85	100	85	90
Mean (M)	55.50	80.50	36.33	42.17
Std. Deviation	20.44	10.93	17.95	20.62

The experimental group showed a notable increase in mean score from the pre-test (M = 55.50, SD = 20.44) to the post-test (M = 80.50, SD = 10.93), indicating a substantial improvement in vocabulary mastery after receiving treatment via the TikTok application. Conversely, the control group experienced a more modest increase, from a pre-test mean of 36.33 (SD = 17.95) to a post-test mean of 42.17 (SD = 20.62), showing limited improvement without the intervention. The standard deviation in the experimental post-test was significantly lower (SD = 10.93) than in the pre-test, suggesting greater consistency in student performance following the TikTok-based instruction. The control group retained a high standard deviation in both tests, implying more variability in student achievement, which could be attributed to the absence of engaging instructional media.

These findings align with recent empirical studies demonstrating that short-form video platforms like TikTok, when integrated into instructional strategies, can increase learner engagement and vocabulary retention, particularly among secondary-level students (Bernard, 2021; Ilham Aufa & Zuhriyah, 2024; Rita & Subekti, 2023; Usman et al., 2024). Empirical studies demonstrate that short-form video platforms like TikTok, when strategically integrated into vocabulary instruction, significantly enhance learner engagement and retention among junior high school students—aligning with the current quasi-experimental finding on countable nouns and daily activity verbs (Bernard, 2021; Ilham Aufa & Zuhriyah, 2024; Rita & Subekti, 2023; Usman et al., 2024).

Furthermore, the significant increase in scores within the experimental group supports the theory that multimodal learning, especially through digital platforms, facilitates better vocabulary acquisition than traditional methods (Rasyid et al., 2023). This is consistent with (Mishra, 2025) *Multimedia Learning Theory* (Mishra, 2025), which posits that students learn more deeply from words and pictures than from words alone.

**Table 1.2 Tests of Normality Results for Pre-Test and Post-Test Scores (Kolmogorov-Smirnov and Shapiro-Wilk)**

Group	Test Type	Statistic	Df	Sig. (p-value)
Experimental (Pre-Test)	Kolmogorov-Smirnov	0.161	30	0.046
	Shapiro-Wilk	0.923	30	0.031
Experimental (Post-Test)	Kolmogorov-Smirnov	0.115	30	0.200*
	Shapiro-Wilk	0.963	30	0.367
Control (Pre-Test)	Kolmogorov-Smirnov	0.152	30	0.073
	Shapiro-Wilk	0.937	30	0.076
Control (Post-Test)	Kolmogorov-Smirnov	0.175	30	0.020
	Shapiro-Wilk	0.923	30	0.032

Group	Test Type	Statistic	df	Sig. (p-value)
Experimental (Pre-Test)	Kolmogorov-Smirnov	0.161	30	0.046
	Shapiro-Wilk	0.923	30	0.031
Experimental (Post-Test)	Kolmogorov-Smirnov	0.115	30	0.200*

Group	Test Type	Statistic	df	Sig. (p-value)
	Shapiro-Wilk	0.963	30	0.367
Control (Pre-Test)	Kolmogorov-Smirnov	0.152	30	0.073
	Shapiro-Wilk	0.937	30	0.076
Control (Post-Test)	Kolmogorov-Smirnov	0.175	30	0.020
	Shapiro-Wilk	0.923	30	0.032

The normality of the data in this study was tested using the Kolmogorov-Smirnov and Shapiro-Wilk tests through the SPSS software. These tests were applied to determine whether the distribution of students' vocabulary scores (pre-test and post-test) in the experimental and control groups followed a normal distribution. According to Ghasemi & Zahediasl (2012), a dataset is normally distributed if the significance value (p-value) exceeds 0.05.

Based on the Kolmogorov-Smirnov test, the pre-test scores in the experimental group had a significance value of 0.046, and the post-test scores showed 0.200, indicating that the pre-test was not normally distributed, while the post-test was. For the control group, the pre-test returned 0.073 and the post-test 0.020, meaning that only the pre-test was normally distributed. Meanwhile, the Shapiro-Wilk test, which is more appropriate for small samples ( $n < 50$ ), confirmed similar results. The pre-test in the experimental group had a significance value of 0.031, indicating non-normality, while the post-test had a significance value of 0.367, suggesting normality. For the control group, the pre-test was also normally distributed (sig. = 0.076), while the post-test was not (sig. = 0.032).

These findings indicate that not all data sets met the assumption of normality, particularly the pre-test scores in the experimental group and the post-test scores in the control group. Therefore, non-parametric statistical tests (e.g.,

Wilcoxon Signed-Rank Test and Mann-Whitney U Test) were deemed more appropriate for further hypothesis testing in this study (Pallant, 2020).

**Table 1.3 Wilcoxon Test in Experimental Class**

Test Statistic	Value	Description
Z	-4.552	Standardized test statistic value
Asymptotic Significance (2-tailed)	.000	p-value indicating statistical significance ( $p < 0.05$ )
Test Used	Wilcoxon Signed-Rank Test	Non-parametric test for paired samples
Note	Based on negative ranks	Direction of difference (post-test > pre-test)

The Wilcoxon Signed-Rank Test was conducted to evaluate the effectiveness of TikTok-based instruction on students' vocabulary acquisition in the experimental group. The results table shows that the Z value was -4.552 with an Asymptotic Significance (2-tailed) of 0.000, below the conventional threshold of  $\alpha = 0.05$ . This indicates a statistically significant difference between the pre-test and post-test scores of students in the experimental class. Based on negative ranks, the negative Z value suggests that most post-test scores were significantly higher than pre-test scores, thereby supporting the hypothesis that TikTok-based vocabulary instruction positively affected students' performance.

This finding aligns with similar recent studies that underscore the value of multimedia learning platforms—especially those that integrate short-form, engaging content like TikTok—in enhancing vocabulary mastery (Alshreef & Khadawardi, 2023; Puspita et al., 2024). Furthermore, non-parametric tests such as the Wilcoxon are particularly suitable when the data do not meet the assumptions of normality. Therefore, the statistically significant result reinforces the conclusion that educational TikTok content can be an effective pedagogical tool for improving vocabulary acquisition among junior high school students.

**Table 1.4 Wilcoxon Test in Control Class**

Test	Z-value	Asymptotic Significance (2-tailed)	Interpretation
Wilcoxon Signed-Rank Test	-3.292	0.001	Significant difference ( $p < 0.05$ )

- The negative Z-value indicates that the post-test ranks are higher than the pre-test.
- The asymptotic significance value less than 0.05 suggests rejecting the null hypothesis, confirming a significant difference between paired samples.

The Wilcoxon Signed-Rank Test was employed to analyze the difference between paired samples when the data did not meet the assumptions of normality (Field, 2018). The test statistic (Z) obtained was -3.292, with an asymptotic significance (2-tailed) value of 0.001. Since the p-value is less than the alpha level 0.05, this indicates a statistically significant difference between the two related samples (Pre-test and Post-test scores). The negative Z-value suggests that the ranks of the post-test scores are generally higher than those of the pre-test scores, implying an improvement in the measured variable (Wilcoxon, 1945; Field, 2018). This finding confirms that the intervention significantly affected the participants' performance.

The Mann-Whitney U test is a non-parametric statistical method used to determine whether there is a significant difference between the distributions of two independent samples, particularly when the data do not meet the assumptions of normality or homogeneity of variance (Gibbons & Chakraborti, 2011; Field, 2018). This test is appropriate for ordinal or continuous data that are not normally distributed, as an alternative to the independent samples t-test (McDonald, 2014).

**Table 1.5 Mann-Whitney Test**

Test Statistics	Value
Mann-Whitney U	58.000
Wilcoxon W	523.000
Z-score	-5.826
Asymptotic Significance (2-tailed)	0.000

The results of the Mann-Whitney U test are presented in Table 6, which indicates a Mann-

Whitney U value of 58.000, a Wilcoxon W of 523.000, a Z-score of -5.826, and an asymptotic significance (2-tailed) of 0.000. The p-value is below the conventional alpha level of 0.05, indicating a statistically significant difference between the vocabulary mastery of students who received instruction through TikTok-based learning and those who did not (Field, 2018).

Consequently, the null hypothesis ( $H_0$ ), which posits no effect of the TikTok application on students' vocabulary mastery, is rejected. This finding suggests that integrating TikTok as an educational tool positively influences vocabulary acquisition among junior high school students, consistent with previous studies emphasizing the impact of digital media on language learning (Stockwell & Liu, 2015).

### Conclusion

This study evaluated the efficacy of educational TikTok content in enhancing vocabulary mastery among junior high school students within an EFL (English as a Foreign Language) context. Employing a quasi-experimental design with 60 seventh-grade students at SMPN 3 Lamongan, the investigation rigorously compared vocabulary acquisition outcomes between an experimental group exposed to TikTok-based instruction and a control group receiving conventional teaching methods. The results indicate that TikTok, a short-form digital media platform, significantly improves students' vocabulary skills relative to traditional pedagogical approaches.

Quantitative analyses demonstrated a marked improvement in vocabulary scores among the experimental group, with the mean post-test score rising from 55.50 (SD = 20.44) in the pre-test to 80.50 (SD = 10.93), a statistically significant gain supported by the Wilcoxon Signed-Rank Test ( $Z = -4.552, p < .001$ ). In contrast, the control group exhibited a modest increase from 36.33 (SD = 17.95) to 42.17 (SD = 20.62), albeit also statistically significant ( $Z = -3.292, p = .001$ ), but substantially less pronounced. The Mann-Whitney U test further substantiated these findings, revealing significant differences between the groups' post-test scores ( $U = 58.000, Z = -5.826, p < .001$ ), thereby confirming the superior efficacy of TikTok-based vocabulary instruction.

The observed improvement aligns well with Mayer's (2009) Multimedia Learning Theory, which posits that learners assimilate

information more effectively when engaged through integrated verbal and visual modalities. TikTok's dynamic combination of audiovisual stimuli and interactive features catalyzes deeper cognitive processing and enhanced vocabulary retention. These outcomes are consistent with prior research underscoring the role of digital platforms in increasing learner motivation, engagement, and subsequent language acquisition (Bernard, 2021; Rasyid et al., 2023; Ilham Aufa & Zuhriyah, 2024).

Moreover, the reduced post-test score variability within the experimental group suggests that TikTok-based instruction may mitigate disparities in learner performance, potentially fostering a more inclusive and supportive learning environment. This is particularly relevant in junior high settings, where heterogeneous learner abilities often present instructional challenges. The appeal and accessibility of TikTok content may effectively cater to diverse learner preferences and cognitive styles, supporting differentiated learning.

Despite these promising findings, this study acknowledges several limitations. The research sample, drawn exclusively from two intact classes at a single institution, limits external validity and generalizability. The intervention duration was relatively brief, precluding long-term retention and transfer effects analysis. Furthermore, the study's scope was confined to vocabulary acquisition, omitting other critical language domains such as grammar, speaking proficiency, and reading comprehension. Future research should extend the investigation longitudinally and encompass a broader spectrum of linguistic competencies to evaluate TikTok's pedagogical utility comprehensively.

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Future inquiries might also consider qualitative methodologies to capture learners' and educators' perceptions of TikTok-based instruction, elucidating motivational, cognitive, and affective dimensions underpinning observed learning gains. Additionally, exploring varied content genres and interactive features within TikTok could refine instructional design strategies, optimizing efficacy for language learning. Investigations into blended approaches that integrate TikTok with gamification, peer collaboration, or adaptive learning technologies hold potential for further enhancing vocabulary acquisition.

This study's findings contribute substantively to the emerging discourse on digital media integration in language education. Educational TikTok content represents a viable and effective pedagogical tool for augmenting vocabulary mastery among junior high school learners. By bridging conventional teaching paradigms with the digital proclivities of contemporary youth, TikTok facilitates an engaging, multimodal learning experience that aligns with current educational imperatives.

Thus, Educational stakeholders are encouraged to consider strategically incorporating TikTok and analogous digital platforms within language curricula to foster enriched, learner-centered environments. As digital technologies continue to permeate educational landscapes, harnessing their pedagogical potential is essential for cultivating proficient, motivated language learners equipped for the communicative demands of the twenty-first century.

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