

THE EFFECT OF TIKTOK SHORT VIDEOS TOWARD STUDENTS' VOCABULARY MASTERY: A QUANTITATIVE RESEARCH APPROACH

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Abstract: *TikTok, apart from being an entertainment platform, holds a valuable function as a tool to assist students in acquiring new vocabulary. This study aims to examine the effect of educational videos on TikTok on students' vocabulary mastery. This study employed a quasi-experimental method, involving members of UKM Bahasa at Universitas Islam Negeri Raden Intan Lampung that contained 30 students. To get an appropriate sample, purposive sampling was used. This study used the pre-test and post-test as the instruments to measure students' vocabulary mastery before and after the treatments. The data were analysed by using validity, reliability, normality, and homogeneity tests. Along with that, there was a significant improvement: the average score on the pre-test was 49.96, and the average score on the post-test was 70.2. Additionally, this study successfully found a significant effect between the use of TikTok educational videos and students' vocabulary mastery. This highlights TikTok's potential as a useful learning tool.*

Keywords: *Educational Videos; Quasi-experimental Study; TikTok; Vocabulary Mastery*

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INTRODUCTION

It is important to acquire a high level of vocabulary in order to master the four English language skills of listening, speaking, reading, and writing. A strong vocabulary is an essential component of language abilities and is required for good language acquisition, as stated by Sari & Aminatun (2021) who also said that vocabulary is a fundamental part of language proficiency and offers an essential foundation for effective learning. It means that by mastering vocabulary, the students are able to form sentences that are patterned and correctly. However, several factors play into students' difficulties in mastering

vocabulary. One of them is that the students have limited vocabulary and have difficulty in remembering new words such as the students might also find it challenging to distinguish between different word classes, translate meanings, and understand homographs—words that are sounded and spelt the same but have distinct meanings.

In addition, the students lack practice in their vocabularies. Although, online and offline learning have been implemented and have become common learning patterns in the language learning process. Furthermore, the lack of motivation and enthusiasm of students in learning vocabulary is also a challenge that must be resolved together so that vocabulary mastery in a foreign language increase. Furthermore, many teachers still use traditional techniques for teaching new vocabulary without incorporating media, such as TikTok videos, while today's students prefer learning that is short videos lasting between 1 and 6 minutes nowadays.

As Efendy et al. (2024) said, vocabulary is an essential aspect of learning a language, specifically English, as it contributes to and influences all the other aspects, such as oral communication, grammar law, written language, listening ability, or even skills to solve written symbols known as reading skills. This statement also aligns with vocabulary being a critical component of language learning, as it is one of the components that links the four skills in language, such as listening, speaking, reading, and writing, in order to achieve effective communication (Abhi Rama et al., 2023).

TikTok is one of the most exciting and new technical language learning aids. It has indeed become one of the most significant platforms in English language learning. TikTok may swiftly and artistically communicate information through an engaging and accessible short video format. TikTok is more than simply amusement when it comes to education; it may also be a useful teaching tool. Moreover, language professionals and instructors precisely have seen the effect of social media in foreign language acquisition (Mauriza et al., 2022). TikTok has become a popular tool among educators to explain certain topics, add interest to learning materials, or even provide students helpful study advice. Usman et al. (2024) states that social media such as TikTok play a vital role as a tool to assist both teachers and students in understanding the meaning of vocabulary and affect students' behaviour in acquiring new vocabulary.

Additionally, TikTok gives students the chance to communicate their knowledge through brief movies, which can foster their creativity and communication abilities. However, TikTok must be used carefully in the classroom; both educators and students must be able to select content that aligns with learning goals and steer clear of anything that could detract from the intended instructional content. As long as its use continues to

emphasise positive educational principles, TikTok may be an enjoyable learning tool. According to Taubah & Hadi (2020), the TikTok app has become extremely popular among millennials, making it a fun and engaging educational tool. Furthermore, TikTok is becoming increasingly useful for students as a vocabulary mastery tool since it provides an interesting and interactive platform that can dramatically improve learning and recall. TikTok's short-form films provide students with enjoyable and educational language content. Students are more likely to stay engaged and remember new terms when terminology is presented in imaginative and visually appealing ways. According to Fabien & Rosario (2023), TikTok is well-known for its vibrant, captivating range of content, which offers users numerous advantages. Additionally, TikTok serves as a useful platform for teachers to share resources with students, whether they take the form of instructional films, movies with advice, or videos presenting scientific facts.

Using TikTok as a learning tool can effectively overcome the problems described above. According to Tampubolon et al. (2023), the use of TikTok affects students' vocabulary mastery. Moreover, Lee (2023) in his dissertation that the TikTok platform helped the students to develop a more integrated view of class learning to enrich students' vocabularies. Rama et al. (2023) found that TikTok improves students' English vocabulary, motivates them to learn, and enhances vocabulary development. In addition, using audio-visual media, like TikTok, can effectively introduce vocabulary by capturing students' attention and motivating them to learn (Marlianingsih, 2016).

Therefore, the use of the TikTok platform has a positive effect on students' English ability, especially in vocabulary context. The distinction between this study and the previous studies is that this study is only focused on members of UKM Bahasa in Universitas Islam Negeri Raden Intan Lampung. This study aims to investigate the impact of TikTok short-form videos as the primary source for students' vocabulary mastery. Furthermore, this study seeks to discover the factors that affect or influence the effect, such as students' engagement and types of educational videos that are given. Referring to the explanations above, this study formulated the research question as below:

1. What is the effect of giving educational videos in the form of TikTok short videos on students' vocabulary mastery?

LITERATURE REVIEW

TikTok Short Video

TikTok has emerged as a preferred platform for learners seeking to strengthen their English language skills. Its engaging format allows both students and teachers to utilize

short videos for effective language instruction. According to Sarkila et al. (2024), TikTok offers useful tools for learning English in addition to being a source of fun. From linguistic advice to cultural insights, users may find a vast array of material that is presented in an entertaining and approachable way. Learners may more easily locate videos that match their interests and skill levels thanks to the platform's technology, which customizes material depending on user interactions. TikTok's short films' distinctive style encourages creativity and interaction in language learning. Educators can leverage user-generated content to create immersive learning experiences that cater to diverse linguistic backgrounds. Suriasmini (2024) notes that videos can range from vocabulary challenges to storytelling, providing a rich tapestry of learning opportunities. This variety not only keeps learners engaged but also aids in the retention of new vocabulary and concepts. As a result, TikTok can become a valuable tool for both formal and informal language education.

Despite its benefits, TikTok also presents challenges for learners and educators. The platform's vast array of content can lead to misinformation if not critically assessed. While TikTok can enhance vocabulary acquisition, the accuracy and authenticity of the content must be scrutinized. Educators and learners alike should develop skills to evaluate the reliability of the videos they consume. This critical approach ensures that learners benefit from high-quality educational content while navigating the platform. Another significant advantage of using TikTok for language learning is its ability to support vocabulary mastery. A robust vocabulary is essential for achieving proficiency in speaking, listening, reading, and writing. Language acquisition research emphasizes the interconnectedness of these skills, which highlights the importance of vocabulary in effective communication (Language et al., 2024). TikTok's interactive format allows students to find new words in context, making it easier to grasp their meanings and usage. This conditional learning can significantly elevate a learner's ability to express themselves accurately in English.

Building a strong vocabulary foundation is crucial for second-language learners. As Nety et al. (2023) explain, vocabulary is one of the important aspects of understanding sentence formation and language skills. However, mastering vocabulary is often a challenging effort due to the complexities of language. TikTok provides an innovative solution by combining interactive media that can motivate students to engage with new vocabulary in an adaptable way. This approach coordinates well with the digital era, where technology plays a significant role in education. The magnitude of vocabulary extends beyond mere word recognition; it is an essential component of language learning. Sufi & Ningsih (2024) argue that vocabulary operates as a fundamental building block for creating meaningful sentences. For second-language learners, developing a

comprehensive vocabulary is essential for connecting listening, speaking, reading, and writing skills (Mota et al., 2005). Thus, effective vocabulary instruction should be integrated into language learning strategies, particularly for learners who face difficulties in articulating their thoughts. TikTok's engaging content can help bridge this gap by providing accessible vocabulary learning opportunities. TikTok represents a revolutionary tool for English language learning, offering both opportunities and challenges. Its engaging, interactive format can enhance vocabulary mastery and support the advancement of essential language skills. However, it is crucial for learners and educators to approach the content critically, ensuring that the information consumed is accurate and beneficial.

Students' Vocabularies

Vocabulary becomes essential for students to enhance their English abilities, both passively and actively, through the knowledge of vocabulary because people cannot convey their feelings both in the form of spoken or written well without enough vocabulary. Heriyanto (2015) states that English learners are unable to comprehend written texts, communicate, or articulate their thoughts, emotions, and ideas. In addition, Liu (2016) discovered that the majority of language learners believe that vocabulary acquisition is a challenging endeavour, and a significant number of them struggle to memorize large quantities of vocabulary or implement it effectively. Furthermore, the writers are able to articulate their written ideas to the readers, and the speakers and their speaking companions are able to communicate effectively due to the large number of vocabulary words they possess (Hukom, 2021). Vocabulary connects every skill in English, such as listening, speaking, reading, and writing in order to communicate effectively. Moreover, vocabulary refers to the total number of words required to convey ideas and express meaning. This highlights the importance of learning vocabulary (Alqahtani, 2015). In addition, to grasp the language, the learner must master the vocabulary. Having a strong vocabulary helps us express ourselves and comprehend others' ideas (Alqahtani, 2015). It proves that mastering vocabularies is not easy for students. They always faced some problems and needed a strong effort to remember and master the numbers of vocabulary.

METHOD

Research Design

This study employed a quantitative research approach, precisely a quasi-experimental design. This study method is comparable to experimental research, but does

not randomly assign people to groups. Instead, it compares groups of individuals based on unchangeable variables like gender or age (Ale, 2020). This study aimed to examine the effect of two variables, which consist of TikTok short-form videos and students' vocabulary mastery. A quasi-experimental design is chosen because it allows researchers to investigate cause and effect in real-world settings without randomly assigning participants to different groups. Quasi-experimental design is suitable for the study as it enables the researchers to assess the natural influence of TikTok short videos on students' ability to retain the vocabulary without manipulating and fully controlling the learning environment. Instead, the study using this design observes and measures how exposure to TikTok educational content contributes to students' vocabulary acquisition. Utilizing a quantitative approach also ensures that the findings are objective, measurable, and statistically valid, allowing for reliable conclusions.

The independent variable of this study is TikTok short videos, which serve as a learning tool for vocabulary mastery. These videos typically contain educational content such as vocabulary-building tips, short conversations, and introducing the C1 vocabulary designed to enhance students' understanding of new words apart from their formal education. The appeal of TikTok lies in its engaging, visually appealing, and fast-paced format that prevents students from getting bored and contributes to a better way to remember the vocabulary. By providing exposure to frequent but repetitive vocabulary usage in different contexts, TikTok videos can potentially assist students in internalize and recalling words more effectively.

The dependent variable in this study is students' vocabulary mastery, which refers to their ability to recognize, understand, retain, and use the words that they have learned in real-world situations effectively. Vocabulary mastery is measured through students' ability to recall definitions, understand the words, use words in appropriate contexts, and recognize them in different forms. Mastering vocabulary is mandatory for English language learning as it is beneficial and influences skills in English, such as reading comprehension, writing ability, speaking fluency, and listening skills. Since TikTok short-form videos provide both visual and auditory elements, they may also enhance students' ability to use words they have learned in other skills.

The primary purpose of this study is to examine the extent to which TikTok short videos influence students' ability to retain and master vocabulary. By utilizing TikTok as a learning tool, the study aims to assess whether exposure to educational content, such as vocabulary tips, language-learning strategies, and short conversations, enhances students' ability to recognize, understand, retain, and use the words in different situations and

contexts. This study focuses on examining how certain features of short videos on TikTok, including visually stimulating and fast-paced formats, contribute to vocabulary mastery. Ultimately, the findings will help determine whether TikTok can be an effective supplementary tool for vocabulary learning in educational contexts.

Population and Sampling Technique

Using all members of UKM Bahasa at Universitas Islam Negeri Raden Intan Lampung, specifically the members that chose the English language in UKM Bahasa. UKM Bahasa itself is a language-based organization that has become a space for college students to improve their proficiency in English and Arabic. This study only emphasized selecting 30 college students who chose English as their skill in the organization among the members of 2021, 2022, 2023, and 2024 college students. In addition, 10 close-ended questions were made in Google Form as a tool to classify the sample needed with certain specific criteria to sort the samples essential to the study. Using purposive sampling, which contains specific questions such as 1. "Do you use TikTok platforms?" 2. "How long do you use TikTok in one day?" and 3. "What purpose do you use TikTok for?" These questions aimed to sort the samples needed for the study based on specific criteria in order to narrow down the selected samples. Among all members of UKM Bahasa, 30 samples were chosen after answering the questions and then later invited to join a *WhatsApp* group as the space for the treatment. These samples consist of one member of 2021, eight members of 2022, 17 members of 2023, and four members of 2024, all of whom chose English as the main language they want to learn about, along with the criteria of using TikTok, which is fulfilled within these samples.

Research Instruments

The primary instrument of this study is pretest and post-tests in the form of vocabulary tests and multiple-choice type of questions that seek to examine students' capability in preserving vocabulary before treatment is given and after the treatment is given. Both tests were tailored using specific authentic blueprints as the references in making the items for pre- and post-tests in order to maintain the measurability and validity of the items to be suitable for the students. The tests themselves consist of 20 items in the form of multiple-choice along with the use of the *Quizziz* app as the media to answer the questions. Range from the easy, mediate, to advanced types of questions randomly implemented in random numbers, emphasizing vocabulary knowledge such as synonyms, antonyms, context, or even collocation. Treatment was also used as an

additional tool to help with the research process in this study. The treatment itself appeared in the form of educational videos from TikTok as the main sources given three times a day for two weeks to the students at *the WhatsApp* group as the space for distributing the videos. The educational videos appear in many forms or types of videos in order to give the students various types of engaging videos to avoid dullness and achieve an effective learning process. After the treatment is fulfilled, the post-test is given to the students in order to explore their improvement or determine whether there is significant enhancement of students' vocabulary mastery after watching the educational videos provided by TikTok.

Table 1.
Blueprint table

Task's Point	Odd	Even
2	3, 7	12, 14, 18
5	1, 9, 15, 17	2, 4, 6, 10, 16, 20
8	5, 11, 13, 19	8
Total	10	10

Point distributions:

- 5 tasks with 2 points = 10
- 5 tasks with 8 points = 40
- 10 tasks with 5 points = 50
- Total 20 tasks with total 100 points.

Data Collection Techniques

Pre-test and post-test were usually used data collection techniques in research to measure the effectiveness of an Involvement. The pre-test was conducted before the Involvement to assess participants' baseline knowledge, skills, or attitudes. This initial assessment provides a reference point against which changes can be measured. such as, , in a study on the effectiveness of a training program, a pre-test should evaluate participants' knowledge before attending the sessions. It helps identify gaps that the intervention aims to address. The post-test was conducted after the intervention to evaluate its impact on participants. It measures changes or improvements in the variables of interest compared to the pre-test results. Such as, after completing the training program, a post-test assesses the knowledge gained by participants. Significant improvements

between pre-test and post-test scores indicate the intervention's effectiveness. This approach provides a clear picture of the outcomes.

By utilizing pre-test and post-test, the writers conducted a "within-subject comparison," which lowers variability and increases the precision of results. Researchers account for individual differences by comparing the same set of individuals before and after the intervention. This method works especially well in clinical, psychological, and educational research. Pre- and post-tests, for instance, can be used to gauge how patients' mental health has changed after a therapeutic intervention. Both tests should be made to assess the same structures consistently in order to guarantee reliable findings. They have to contain elements that are trustworthy, legitimate, and in line with the goals of the study. Before using the instruments widely, researchers frequently conduct pilot tests to improve them. Maintaining consistent circumstances for both exams is also crucial in order to reduce biases. This guarantees that any alterations seen are the result of the intervention and not of other influences. When giving pre - test and post-tests, ethical concerns are essential, particularly in delicate research fields. Informed consent should be obtained, and participant confidentiality should be maintained. Additionally, they ought to describe the tests' objectives and the intended use of the results. In order to address any issues, participants should also get a debriefing following the post-test. Following ethical guidelines protects the integrity of the research process and builds confidence.

Data Analysis Techniques

The strength and direction of the linear link between each item and the overall score are ascertained using the Pearson Product-Moment Correlation in the validity test. This test aids in determining whether or not each item on a scale makes a significant contribution to the construct being examined. The validity of an item is shown by a strong and significant correlation, usually more than 0.3. Items that have a substantial correlation with the total motivation score, for instance, are deemed legitimate in a motivation assessment questionnaire. This guarantees that the analysis contains only pertinent and helpful items. Cronbach's Alpha is used for the reliability test, which measures the internal consistency of a scale or instrument. It indicates how well the items in a test measure the same underlying construct. A Cronbach's Alpha value above 0.7 is generally acceptable, while values above 0.8 or 0.9 indicate good or excellent reliability. For instance, if a survey assesses job satisfaction, a high Cronbach's Alpha would suggest that all items consistently

measure satisfaction. This analysis helps identify and remove items that do not contribute to reliability.

The Shapiro-Wilk test is employed for the normality test to check if the data follows a normal distribution, a key supposition for many quantitative tests. A non-significant result ($p > 0.05$) indicates that the data is normally distributed. In addition to the statistical test, visual tools like histograms and Q-Q plots can be used to assess normality. Such as, normally distributed data in a study on academic performance ensures that further analyses, such as correlation and regression, are valid. Normality is essential for the proper application of parametric statistical methods. The homogeneity of variances, which is crucial for comparing groups, is evaluated using Levene's Test. It determines if the variances of the several groups are equal, which is a prerequisite for many parametric tests. A result that is non-significant ($p > 0.05$) indicates that the homogeneity condition is satisfied. For instance, Levene's test guarantees that the variance in scores between groups is comparable when comparing test results from various teaching philosophies. For group comparisons to remain meaningful, homogeneity is essential.

These data analysis methods—validity, reliability, normalcy, and homogeneity tests—all work together to make sure the data satisfy the presumptions needed for precise and trustworthy statistical analysis. Tests for validity and reliability attest to the suitability and consistency of the measuring instruments. The criteria for variance and data distribution are validated by normality and homogeneity tests. The general trustworthiness of the study's conclusions is increased when these tests are applied correctly. These techniques offer a strong basis for deciphering the findings and coming to insightful conclusions.

RESULT AND DISCUSSION

The Results of Students' Vocabulary Test in the Form of Pre-Test and Post-test

Before conducting the treatment in the form of educational videos with TikTok as the main source, it is mandatory for the students to be tested with a pre-test in the form of a vocabulary test that consists of 20 items with multiple-choice types of questions. This test seeks to explore the students' capability of their vocabulary mastery before the treatments are given to them. Aiming for an accurate result, this study seeks to know the students' capacity and capability for gaining new vocabulary later on the treatments.

Table 2. showed the pre-test results consisted of true answered questions by the students, total questions, and the score of the students' result in answering the pre-test questions. Furthermore, the pre-test result showed an average score of the students are

49,96, with minimum score is 24 and maximum score is 91. This result showed that students' capability in preserving vocabulary are still low, indicating a low engagement before educational videos are given as the treatment.

Table 2.
 Pre Test Result

No.	Participants' Name	True Answer	Total Questions	Score
P 1	JS	17	20	91
P 2	ARIF	17	20	88
P 3	NS	14	20	76
P 4	KGA	13	20	68
P 5	CNAF	13	20	68
P 6	ALR	12	20	63
P 7	AKW	12	20	60
P 8	SNL	12	20	60
P 9	RTN	10	20	56
P 10	RA	11	20	55
P 11	SHF	12	20	54
P 12	MFM	11	20	52
P 13	AAP	11	20	52
P 14	ARA	10	20	50
P 15	AN	11	20	49
P 16	DRM	11	20	49
P 17	K	9	20	48
P 18	RP	10	20	47
P 19	AG	9	20	45
P 20	FLR	10	20	44
P 21	SHF	9	20	39
P 22	A	8	20	37
P 23	LR	9	20	36
P 24	DFW	7	20	35
P 25	DL	8	20	34
P 26	NNO	9	20	38
P 27	DU	7	20	32
P 28	DY	5	20	25
P 29	ANA	6	20	24
P 30	SP	6	20	24
Avarage				49,96
Minimum				24
Maximum				91

Table 3 .
Post Test Result

No.	Participants' Name	True Answer	Total Answer	Score
P 1	JS	18	20	90
P 2	ARIF	18	20	87
P 3	NS	17	20	79
P 4	KGA	16	20	86
P 5	CNAF	18	20	93
P 6	ALR	13	20	68
P 7	AKW	16	20	77
P 8	SNL	11	20	55
P 9	RTN	12	20	60
P 10	RA	15	20	78
P 11	SHF	15	20	75
P 12	MFM	14	20	64
P 13	AAP	10	20	47
P 14	ARA	18	20	93
P 15	AN	11	20	55
P 16	DRM	16	20	86
P 17	K	14	20	70
P 18	RP	10	20	53
P 19	AG	14	20	70
P 20	FLR	9	20	51
P 21	SHF	15	20	78
P 22	A	15	20	78
P 23	LR	17	20	88
P 24	DFW	10	20	53
P 25	DL	7	20	32
P 26	NNO	15	20	81
P 27	DU	12	20	57
P 28	DY	10	20	53
P 29	ANA	18	20	93
P 30	SP	13	20	56
	Average			70,2
	Minimum			32
	Maximum			93

Table 3 shows the results of students' post-test consist the same as the pre-test table. In addition, the post-test resulted show significant improvement which can be seen in the average score of the students in post-test are 70,2, along with minimum score is increased to 32 and maximum score is 93. Based on this table, it can be seen that there is

significant improvement on the students' ability on preserving and gaining new vocabulary after the treatment in form of educational videos are given. Indicating there is valid effect between TikTok short-form videos and students' vocabulary mastery among college students, precisely at UKM Bahasa Universitas Islam Raden Intan Lampung, which can be seen at the improvement of the average score. On the pre-test average score is 49,96 which classified as low, while in the post-test it is shows the average score is 70,2 indicating an amazing enhancement toward students' vocabulary mastery.

Data Analysis

Table 4.

Mean score of Pre-Test and Post -Test

No	Participants' Names	Pre-test	Post-test
P 1	JS	91	90
P 2	ARIF	88	87
P 3	NS	76	79
P 4	KGA	68	86
P 5	CNAF	68	93
P 6	ALR	63	68
P 7	AKW	60	77
P 8	SNL	60	55
P 9	RTN	56	60
P 10	RA	55	78
P 11	SHF	54	75
P 12	MFM	52	64
P 13	AAP	52	47
P 14	ARA	50	93
P 15	AN	49	55
P 16	DRM	49	86
P 17	K	48	70
P 18	RP	47	53
P 19	AG	45	70
P 20	FLR	44	51
P 21	SHF	39	78
P 22	A	37	78
P 23	LR	36	88
P 24	DFW	35	53
P 25	DL	34	32
P 26	NNO	38	81
P 27	DU	32	57
P 28	DY	25	53
P 29	ANA	24	93
P 30	SP	24	56
Mean (Pre-test)		49,96	
Mean (Post-test)		70,2	

Std. deviation (Pre-test)	17,01011
Std. deviation (Post-test)	16,33148
Std. error mean (Pre-test)	3,105606
Std. error mean (Post-test)	2,981707

Table 4 shows that the mean scores of the pretest and the post-test were very different, indicating there is significant improvement of the students after the treatments are given. This table also provides the standard deviation of both pre-and post-test, along with the standard error mean. In addition, the standard deviation of the pre-test and post-test was not quite different from each other, indicating the score distribution of both pre-and post-test was not scattered (Yoestara, 2024). Based on this table, it shows an increased achievement of the students' vocabulary mastery after watching educational TikTok videos.

Table 5.
Analysis Data

Aspect	Statistics	Results	Notes
Validity Test	All variables	70%	Significant
Reliability Test	Cronbach's Alpha	0,675	Good Reliability (p > 0,6)
Normality Test	Shapiro-Wilk (Pre-Test)	0,956	p = 0,247 (Normal)
	Shapiro-Wilk (Post-Test)	0,941	p = 0,099 (Normal)
Homogeneity Test	Levene's Test (Mean)	0,176	p = 0,676 (Fulfilled)
	Levene's Test (Median)	0,19	p = 0,663 (Fulfilled)

The table 5. conveyed the tests that have been passed by the data from the students, both pre-test and post-test. The tests consist of validity, reliability, normality, and homogeneity tests, which aims to validate the items of the tests. The validity test seeks to explore if the items of the test, starting from item one to item 20 are valid. The threshold of the validity is 70% of the items are all valid according to Pearson Product Moment. The reliability test, using Cronbach's Alpha, seeks to examine if the items of the test are appeared to measured the consistency and accuracy of the items. The normality test seeks to determine whether the data follows a normal distribution or not. The last one, which homogeneity test aims to test the quality of variances among different samples.

Table 6.

Paired sample statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	49,9667	30	17,01011	3,10561
	POST TEST	70,2000	30	16,33148	2,98171

Table 7.

Paired sample correlation

		N	Correlation	Sig.
Pair 1	PRE TEST & POST TEST	30	,387	,035

Table 8.

Paired Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper		
Pair 1	PRE TEST - POST TEST	-2.023333	1.847400	337.287	-2.713	-1.333	-5.99	29	.000

Based on Table 8, there are significant differences between the pre-test and post-test results. The pre-test mean score is lower than the post-test, indicating improvement after the treatment. Table 2 supports this, showing a significant value of 0.035, which is higher than 0.05, indicating a positive correlation between the pre-test and post-test results. Table 3 shows a significant 2-tailed value of 0.000, lower than 0.05, confirming significant differences between the pre-test and post-test. The paired sample T-test results indicate that TikTok short videos are effective, engaging, and suitable for students with diverse learning backgrounds in enhancing vocabulary mastery.

Discussion

The results of the vocabulary tests conducted before and after the treatment using educational TikTok videos reveal significant insights into the students' vocabulary mastery. The pre-test results indicated an average score of 49.96, that suggests the students had a low level of vocabulary knowledge prior to the intervention (Usman et al., 2024), (Tampubolon et al., 2024). This low average score, with a minimum of 24 and a maximum of 91, highlights the various levels of vocabulary proficiency among the participants. Such as disparity indicates that while some students possess a relatively strong vocabulary foundation, many others struggle significantly, which may impede their overall academic performance. Following the treatment, the post-test results showed a marked improvement in the students' vocabulary scores, with an average of 70.2. This increased in average score demonstrates the effectiveness of using TikTok as a method for vocabulary learning. The minimum score rose to 32, and the maximum score reached 93, indicating that even the students who initially performed poorly showed improvement. This suggests that the educational videos were effective in enhancing vocabulary retention and understanding among the students (Dewa et al., 2024; Efendy et al., 2024; Lombok, 2024).

The data analysis further supports the conclusion that the treatment had a positive impact on vocabulary mastery. The standard deviation for both pre-test and post-test scores was relatively similar, indicating which the distribution of scores was consistent across both assessments. This consistency advise that the educational intervention was uniformly beneficial, give students at various proficiency levels to improve their vocabulary skills (Aida et al., 2023; Ruth et al., 2023; Subekti, 2023). The results also highlight the potential of integrating modern technology, such as TikTok, into educational practices to foster better learning outcomes.

Futhermore, the statistical tests conducted, including validity, reliability, normality, and homogeneity tests, sustain the robustness of the study's findings. The validity test showed that 70% of the items were significant, while the reliability test indicated a Cronbach's Alpha of 0.675, suggesting good reliability. These results confirm that the assessment tools used were both valid and reliable, providing intimate in the accuracy of the findings. The normality tests indicated that the data followed a normal distribution, more validating the results. The significant improvement in vocabulary mastery after the treatment suggests a strong effect of the use of TikTok short videos toward students' vocabulary mastery. This finding agree with contemporary educational theories that advocate for the use of multimedia resources to engage students and facilitate learning.

The interactive nature of TikTok, combined with its popularity among students, likely contributed to increased motivation and engagement, which are critical factors in effective learning (Skripsi et al., 2024).

Additionally, the results of this study have implications for educators and curriculum developers. By incorporating platforms like TikTok into language learning curricula, educators can create more dynamic and engaging learning environments. This approach not only caters to the interests of students but also leverages their familiarity with digital platforms to enhance educational outcomes. As such, the findings of this study advocate for a shift in teaching methodologies to include more technology-driven resources. The study demonstrates that the use of educational TikTok videos can significantly enhance vocabulary mastery among students. The pre-test and post-test results illustrate a clear improvement in vocabulary knowledge, supported by robust statistical analysis. As educational practices continue to evolve, integrating technology into language learning will be essential for fostering student engagement and improving academic performance. Future research could explore the long-term effects of such interventions and their applicability across different educational contexts and subjects.

CONCLUSION

This study has shown a strong positive effect of TikTok short videos on students' vocabulary mastery at UKM Bahasa, Universitas Islam Negeri Raden Intan Lampung. Students' vocabulary scores significantly improved following the intervention, as seen by the pre-test and post-test results, with the average score rising from 49.96 to 70.2. This implies that TikTok videos' captivating and participatory qualities successfully improve students' language recall and comprehension. The results demonstrate how digital platforms may increase student motivation and engagement, which is consistent with modern educational theories that support the use of multimedia resources in language acquisition.

Based on the research results, it is recommended that educators incorporate TikTok and similar digital platforms into their language learning curricula to create more dynamic and engaging learning environments. Teachers can improve students' vocabulary learning and general language competency by taking advantage of their familiarity with these platforms. The long-term impacts of utilizing TikTok as a teaching tool and its suitability for a range of disciplines and educational environments should also be investigated in future studies. This might help teachers create creative teaching methods that appeal to

today's digital learners and offer greater insights on how well multimedia tools support language learning.

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