

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This study employs a quantitative descriptive method. The choice of this approach is based on the study's primary objective, which is to describe and explain how students use TikTok as a tool for learning English vocabulary, the results of which are presented in the form of numerical data and percentages. In line with Creswell's (2014) perspective, quantitative methods are used when researchers aim to map relationships between variables through the collection and analysis of numerical data using statistical procedures. Through this approach, the researcher's primary focus is not on identifying cause-and-effect relationships, but rather on obtaining a comprehensive, structured, and measurable understanding of students' perceptions.

A descriptive approach was specifically used so that this study would not test any hypotheses; rather, it merely describes what occurred. According to Sugiyono (2019), descriptive research aims to assess the characteristics of the population or phenomenon under study without making comparisons or establishing relationships with other variables. This aligns with the objective of this study, which is to determine how students at SMAN 1 Margaasih Bandung High School view the importance of TikTok as a medium for vocabulary learning, based on two dimensions of the Technology Acceptance Model (TAM): Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

These findings are consistent with previous studies that have shown similar results. Rama et al. (2023) employed a quantitative method to investigate high school students' perceptions of TikTok as an effective learning medium for improving English vocabulary at SMAN 14 Bandar Lampung, and found that students exhibited a positive attitude toward the use of TikTok in their vocabulary learning process. Similarly, Pratami and Syafryadin (2023) used a descriptive approach with a questionnaire to examine university students' perceptions of TikTok as a medium for learning English,

concluding that students strongly agreed that TikTok is effective and beneficial as a language learning tool. Both studies support the suitability of a descriptive quantitative design for this type of research.

The data in this study were collected via a questionnaire and analyzed using descriptive statistics, including frequency counts, percentages, and mean values. This method has also been used in similar studies, such as that conducted by Alshreef and Khadawardi (2023), who employed a descriptive quantitative approach using a Likert-scale questionnaire to analyze EFL students' perceptions of TikTok as a medium for vocabulary learning.

B. Research Site and Time

This study was conducted at SMAN 1 Margaasih, located in Bandung, Indonesia. This school was chosen as the research site because the researcher had direct access to the students and the school environment, which also supported the focus of this study. The study was conducted during the 2026/2027 school year. Data collection was conducted online via a Google Form distributed to students through a WhatsApp group, due to its practicality and efficiency in reaching high school students who are already accustomed to digital platforms.

C. Population and Sample

1. Population

The population in this study consists of active 12th-grade students at SMAN 1 Margaasih, Bandung during the 2026/2027 academic year. According to Sugiyono (2019), the population refers to the totality of research objects or subjects located within a specific area, whose characteristics align with the research topic. In this study, the selected population consists of students who actively use TikTok and have experience learning English vocabulary through the platform. This aligns with the context of current high school students, who are considered active users of social media, including TikTok, as also noted by Rama et al. (2023) in their study at SMAN 14 Bandar Lampung, where the

population consisted of 192 students spread across six classes.

2. Sample

The sample in this study was selected using purposive sampling. This technique was chosen because not all students in the study population had experience using TikTok as a vocabulary learning tool. Purposive sampling allows researchers to select participants based on specific criteria that align with the research objectives (Creswell, 2014). The criteria for selecting participants in this study were: (1) they are active students at SMAN 1 Margaasih, Bandung; (2) they have a TikTok account; and (3) they have experience accessing content on TikTok for English vocabulary learning.

Based on these criteria, the researcher determined that the sample consisted of 32 students from class XI . This number is also considered sufficient for descriptive quantitative research, in line with Sugiyono's (2019) recommendation that a sample size between 30 and 500 is appropriate for quantitative research.

D. Research Instrument

The primary instrument used in this study was a questionnaire. The questionnaire was designed as a Likert scale, which is commonly used in quantitative research to measure respondents' attitudes, perceptions, or opinions. As noted by Pratami and Syafryadin (2023), questionnaires are an effective tool for collecting data on students' perceptions, as they allow for the structured and measurable collection of diverse opinions. The questionnaire in this study was adapted from an instrument developed by Alshreef and Khadawardi (2023), which was originally used to investigate EFL students' perceptions of TikTok as a vocabulary learning tool. The questionnaire consists of 16 statements divided into two sections based on the Technology Acceptance Model (TAM): Perceived Usefulness (PU) with 8 statements, and Perceived Ease of Use (PEOU) with 8 statements.

Each statement was measured using a five-point Likert scale with the following response options: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly

Disagree (1). The higher the score, the more positive the students' perception of TikTok as a medium for learning English vocabulary. A similar Likert scale questionnaire was also used by Rama et al. (2023) in their study at the high school level, where students responded to statements about TikTok's role in vocabulary learning, and the results indicated an overall positive perception.

Table 3. 1 Questionnaire Blueprint

Dimension	Indicators	Item No.
Perceived Usefulness (PU)	Tiktok helps in learning vocabulary effectively, retaining words, and supporting language skills improvement.	1-8
Perceived Ease of Use (PEOU)	Tiktok is easy to access, navigate, and use for vocabulary learning purposes.	9-16

Table 3. 2 Research Questionnaire Item

No.	Statement	Dimension
1.	Tiktok helps me learn new English vocabulary more effectively. (<i>TikTok membantu saya mempelajari kosakata bahasa Inggris baru dengan lebih efektif</i>)	PU
2.	Using Tiktok makes it easier for me to understand the meaning of new words. (<i>Dengan menggunakan TikTok, saya jadi lebih mudah memahami arti kata-kata baru</i>)	PU
3.	I think TikTok is a useful medium for expanding	PU

	my English vocabulary. <i>(Menurut saya, TikTok adalah sarana yang berguna untuk memperluas kosakata bahasa Inggris saya)</i>	
4.	The educational content on TikTok is relevant to my vocabulary learning needs. <i>(Konten edukatif di TikTok sesuai dengan kebutuhan saya dalam belajar kosakata)</i>	PU
5.	Watching TikTok videos helps me remember new vocabulary better. <i>(Menonton video TikTok membantu saya mengingat kosakata baru dengan lebih baik.)</i>	PU
6.	Learning vocabulary through TikTok is more beneficial than using conventional methods such as assignments or exercises, Q&A sessions with the teacher in class, listening to the teacher's lecture. <i>(Mempelajari kosakata melalui TikTok lebih bermanfaat daripada menggunakan metode konvensional seperti penugasan atau latihan, tanya jawab dengan guru di kelas, mendengarkan materi dari guru.)</i>	PU
7.	I feel that TikTok is an important tool for	PU

	improving my English vocabulary. <i>(Saya merasa bahwa TikTok adalah alat yang penting untuk meningkatkan kosakata bahasa Inggris saya.)</i>	
8.	TikTok provides authentic vocabulary materials that are beneficial for my learning. <i>(TikTok menyediakan materi kosakata yang otentik dan bermanfaat bagi proses belajar saya.)</i>	PU
9.	I find it easy to navigate TikTok to look for vocabulary learning content. <i>(Saya merasa mudah menjelajahi TikTok untuk mencari konten pembelajaran kosakata.)</i>	PEOU
10.	TikTok is easy to access whenever I want to learn English vocabulary. <i>(TikTok mudah diakses kapan pun saya ingin belajar kosakata bahasa Inggris.)</i>	PEOU
11.	Using TikTok for vocabulary learning does not require much effort. <i>(Menggunakan TikTok untuk belajar kosakata tidak membutuhkan banyak usaha.)</i>	PEOU
12.	TikTok features (e.g., subtitles, audio, captions) are easy to use for learning vocabulary.	PEOU

	<i>(Fitur-fitur TikTok (misalnya, teks terjemahan, audio, dan keterangan) mudah digunakan untuk belajar kosakata.)</i>	
13.	I can learn new vocabulary through TikTok at my own pace without any difficulty. <i>(Saya bisa mempelajari kosakata baru melalui TikTok sesuai kecepatan saya sendiri tanpa kesulitan apa pun.)</i>	PEOU
14.	The English vocabulary content on TikTok is easy to understand. <i>(Kata-kata dalam bahasa Inggris yang ada di TikTok mudah dipahami.)</i>	PEOU
15.	I do not find it difficult to search for English vocabulary learning content on TikTok. <i>(Saya tidak merasa sulit untuk mencari konten pembelajaran kosakata bahasa Inggris di TikTok.)</i>	PEOU
16.	Overall, TikTok is a user-friendly platform for English vocabulary learning. <i>(Secara keseluruhan, TikTok adalah platform yang ramah pengguna untuk belajar kosakata bahasa Inggris.)</i>	PEOU

1. Validity

Before distributing the questionnaire to respondents, the researcher first

ensured that the instrument was valid. In this study, content validity was established by consulting with the research advisor regarding the questionnaire to ensure that all questions were relevant to the research objectives and accurately represented the constructs being measured. In addition, construct validity was examined through a pilot study involving a small group of students outside the main sample. According to Pratami and Syafryadin (2023), an instrument is considered valid if the corrected item-total correlation coefficient obtained is ≥ 0.50 . The pilot test results were analyzed using the Pearson product-moment correlation formula with the help of Microsoft Excel. An item is considered valid if the calculated $r_{\text{(calc)}}$ is greater than $r_{\text{(table)}}$ at a significance level of 0.05 (Sugiyono, 2019).

2. Reliability

Reliability testing is done to ensure that the questionnaire produces consistent results when administered under similar conditions. In this study, reliability is measured using Cronbach's Alpha coefficient, which is the most commonly used method for Likert-scale instruments. According to Pratami and Syafryadin (2023), a Cronbach's Alpha value of ≥ 0.60 indicates that the instrument is reliable and the results are consistent. Meanwhile, Zakariya (2022) further noted that a Cronbach's Alpha value of 0.70 or above is generally considered a more satisfactory level of internal consistency. The reliability analysis in this study is carried out using Microsoft Excel, and items that do not meet the minimum threshold will be revised or removed from the questionnaire.

E. Research Procedure

The research procedure in this study consists of three main stages: preparation, data collection, and data analysis. Each stage is described as follows.

1. Preparation Stage

In the preparation stage, the researcher starts by identifying the research problem and determining the research objectives. After that, the researcher reviews relevant literature and previous studies related to students' perception

of TikTok and English vocabulary learning, including studies by Rama et al. (2023) and Pratami and Syafryadin (2023) which provide a strong foundation for this research. The researcher then develops the research instrument (questionnaire) by adapting the items from Alshreef and Khadawardi (2023) and adjusting them to suit the context of high school students. Before distributing the questionnaire to the actual respondents, a pilot test is conducted to check the validity and reliability of the instrument.

2. Data Collection Stage

After the instrument is declared valid and reliable, the researcher distributes the questionnaire to the selected participants through Google Form. The link to the questionnaire is shared via the students' WhatsApp group to make it more accessible. Participants are given a clear explanation of the purpose of the study and how to fill out the questionnaire properly. As Pratami and Syafryadin (2023) also did in their study, the use of a Google Form questionnaire is considered practical and efficient for reaching students who are familiar with digital tools in their daily lives. The data collection process is carried out for approximately one to two weeks to ensure that all selected participants have enough time to respond.

3. Data Analysis Stage

Once all the responses are collected, the researcher processes and analyzes the data using descriptive statistical analysis. The analysis includes calculating frequency, percentage, and mean scores for each item and each dimension. The results are then interpreted using a mean score interpretation scale to determine the level of students' perception of TikTok as a vocabulary learning medium.

F. Data Analysis Technique

Since this study employs a descriptive quantitative approach, the data collected from the questionnaire were analyzed using descriptive statistics. This analysis focuses on three main calculations: frequency, percentage, and mean. These calculations were

performed for each questionnaire item as well as for each dimension (Perceived Usefulness and Perceived Ease of Use) to provide a comprehensive overview of students' overall perceptions.

The percentage for each response option is calculated using the following formula:

$$P = (f / N) \times 100\%$$

Where P is the percentage, f is the frequency of responses for a given option, and N is the total number of respondents (Sugiyono, 2019).

In addition, the mean score for each item or dimension is calculated using the following formula, as adapted from Pratami and Syafryadin (2023):

$$\bar{X} = \Sigma f.s / N$$

Where $\bar{X}$ is the average/mean value, f is the frequency of respondents' answers, s is the respondent's answer score, and N is the total number of respondents. The mean scores are then interpreted using the following scale, which is adapted from a five-point Likert scale interpretation:

Table 3. 3 Mean Score Interpretation Scale

Mean Score Range	Category	Interpretation
4.21 - 5.00	Very Positive	Students strongly perceive TikTok as important
3.41 - 4.20	Positive	Students perceive TikTok as important
2.61 - 3.40	Neutral	Students are uncertain about TikTok is important
1.81 - 2.60	Negative	Students do not perceive TikTok as important

1.00 - 1.80	Very Negative	Students strongly do not perceive TikTok as important
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Adapted from Alshreef and Khadawardi (2023).

The data analysis in this study is carried out with the help of Microsoft Excel. Microsoft Excel is used for calculating frequency and percentage, and mean scores for each questionnaire item and dimension, as well as validity testing (Pearson product-moment correlation) and reliability testing (Cronbach's Alpha), are all conducted using Microsoft Excel. The final results are presented in tables and accompanied by written descriptions to make them easier to interpret.

G. Research Ethics

Considering that this study involved human participants, the researcher applied several ethical principles throughout the research process. According to Alhabsi (2024), obtaining informed consent from research participants is a fundamental ethical requirement that ensures participants understand the purpose of the study, their right to withdraw at any time, and how their data will be used. In line with this principle, before distributing the questionnaire, the researcher explained the purpose of the study, the voluntary nature of participation, and the confidentiality of the data to all prospective respondents through the WhatsApp group used for data collection.

Several ethical considerations were applied in this study. First, participation was entirely voluntary; students were not obligated to complete the questionnaire and could withdraw at any point without any academic consequence. Second, all responses collected through the Google Form were kept anonymous, as the instrument did not request participants' names or other identifying information, in order to protect their privacy and encourage honest responses. Third, the data obtained were used strictly for academic purposes related to this undergraduate thesis and were not shared with any third party. Fourth, permission to conduct the research was obtained from the relevant teacher and school authorities at SMAN 1 Margaasih prior to data collection. These measures were taken to ensure that the research was conducted in accordance with

basic ethical standards for studies involving human participants (Alhabsi, 2024).

H. Limitations of the Research Design

While the descriptive quantitative design adopted in this study is appropriate for measuring students' perceptions in a structured and measurable way, it is important to acknowledge several methodological limitations inherent to this approach. According to Creswell (2014), descriptive quantitative designs are effective for describing patterns and tendencies within a population but are limited in their ability to explain the underlying reasons behind those patterns, since they do not incorporate qualitative data such as interviews or open-ended responses.

In the context of this study, this means that while the questionnaire results indicate that students generally perceive TikTok positively as a vocabulary learning medium, the instrument does not capture the specific reasons behind neutral or less positive responses, such as those observed in Item 6 and Item 11. Additionally, the purposive sampling technique used to select the 32 respondents, while appropriate for ensuring that participants had relevant experience with TikTok, limits the generalizability of the findings to the broader population of senior high school students who may not use TikTok as frequently or in the same manner. Future research could address these limitations by incorporating qualitative methods, such as interviews or focus group discussions, to provide a more comprehensive understanding of the factors underlying students' perceptions.

