

## **CHAPTER 3**

### **RESEARCH PROCEDURES**

#### **A. Research Design**

The research utilized a quantitative approach with a survey design. A survey used in the study as a method to obtain primary data, and survey is essential for collecting, analyzing, and interpreting quantifiable data to examine TikTok's effectiveness as a language learning source (Abdullah et al., 2023). Survey research provides a numeric description of trends, attitudes, or opinions of a population by studying a sample from that population (Creswell, 2014). Thus, the study aims to explore the perceptions of undergraduate students in one of the Universities in Tasikmalaya towards TikTok used for English learning, and quantitative surveys are used because the data collected are statistical data.

#### **B. Population and Sample**

In this research, the population is the undergraduate students at one of the universities in Tasikmalaya who use the TikTok application to learn English. Stratified random sampling technique was used to get the sample of the population, with the number of samples determined using the Slovin formula with 5% margin of error. The formula that used shown below (Fadrial et al., 2021)

$$n = \frac{N}{1 + N(e^2)}$$

Note:

n : number of samples

N : population

e : fault of tolerance limit (0.05)

Sampling was done proportionately in each stratum; they are seven faculties at the university. Then, stratified random sampling is carried out by writing each number of students on a small paper, folded, and then taken randomly as much as the proportion of each stratum, and all the number taken is the sample in this research.

The section below presents the general information of respondents including gender, distribution of respondents based on the faculty, and duration of TikTok use per day.

**Table 2.** Gender of the Respondents

| <b>Gender</b> | <b>Frequencies (N)</b> | <b>Percentage (%)</b> |
|---------------|------------------------|-----------------------|
| Male          | 44                     | 35.48                 |
| Female        | 80                     | 64.52                 |
| <b>Total</b>  | <b>124</b>             | <b>100</b>            |

This research involved 124 undergraduate students as seen in the table above. 44 male (35.48%) and 80 female (64.52%) were involved in this research from seven faculties in one of the universities in Tasikmalaya who were sampled using stratified random sampling technique. The distribution of respondents from each faculty can be seen in the table 3 below.

**Table 3.** Distribution of Respondents Based on Faculty

| <b>Faculty</b> | <b>Respondent</b> | <b>Percentage (%)</b> |
|----------------|-------------------|-----------------------|
| FKIP           | 45                | 36.3                  |
| FEB            | 17                | 13.7                  |
| FT             | 11                | 8.9                   |
| FP             | 11                | 8.9                   |
| FISIP          | 11                | 8.9                   |
| FIK            | 19                | 15.3                  |
| FAI            | 10                | 8.1                   |
| <b>Total</b>   | <b>124</b>        | <b>100</b>            |

From the demographic data presented in table 2 and table 3, then the duration of the average time spent by students in using the TikTok application per day showed in the following table.

**Table 4.** Duration of TikTok Use per-Day

| <b>Duration</b> | <b>Frequency (N)</b> | <b>Percentage (%)</b> |
|-----------------|----------------------|-----------------------|
|-----------------|----------------------|-----------------------|

|              |            |            |
|--------------|------------|------------|
| < 3 hour     | 14         | 11.3       |
| 3-6 hours    | 74         | 59.7       |
| > 6 hours    | 36         | 29         |
| <b>Total</b> | <b>124</b> | <b>100</b> |

Based on the data in table 4, the majority of students (59.7%) reported using the TikTok application for 3 to 6 hours per day. This shows a moderate level of student engagement on the TikTok platform. Meanwhile, 29% of the students used TikTok for more than 6 hours, reflecting a high level of usage. Only 11.3% of the students used TikTok for less than 3 hours, indicating a relatively low level of usage among a small part of the participants.

### C. Data Collection and Instrument

Data collection in this study was carried out through a close-ended online questionnaire utilizing Google Form to gather the data. The instrument in this study was adapted from Davis (1989), Abdullah et al. (2023), Nadhifa and Kher (2022) which is based on the Technology Acceptance Model by with the aspects used from TAM including perceived usefulness, perceived Ease of use, attitude toward using, behavioral intention to use, and actual use. Adaptations were made to adjust the context in this study, in Tasikmalaya and while maintaining the original conceptual basis, the Technology Acceptance Model (TAM). Adaptation of the questionnaire was done for the consistency of language, adjustment and simplification of sentences to be more concise and easy to understand, as well as spelling and grammar by ensuring sentences are in accordance with Indonesian language rules. The questionnaire used Indonesian to avoid confusion of participants in providing responses. Then its validity and reliability were tested using IBM SPSS (Statistical Package for Social and Science) version 23.

#### 1. Validity

Validity comes from the word valid which means legal or appropriate, so the validity of the instrument is related to the accuracy of a

measuring instrument with the object being measured. Validity was conducted with an instrument containing 42 statement items that were tried to 30 non-sample students. To find out whether the instrument is valid or not, a Pearson correlation calculation to get  $r$ -observed was then compared to the  $r$ -table 0.361 ( $N=30$ ). If  $r$ -observed ( $r_o$ ) is higher than  $r$ -table ( $r_t$ ) at the 5% significant level, the questionnaire item is valid. Meanwhile, if the  $r$ -observed ( $r_o$ ) is less than  $r$ -table ( $r_t$ ), the item is not valid.

After the analysis with the help of SPSS version 23, the calculation result can be seen in the table below.

**Table 5.** The Result of Questionnaire Validity Test

| Statement | $r$ -observed | $r$ -table | Note  |
|-----------|---------------|------------|-------|
| 1         | 0.587         | 0.361      | Valid |
| 2         | 0.648         | 0.361      | Valid |
| 3         | 0.763         | 0.361      | Valid |
| 4         | 0.739         | 0.361      | Valid |
| 5         | 0.648         | 0.361      | Valid |
| 6         | 0.529         | 0.361      | Valid |
| 7         | 0.626         | 0.361      | Valid |
| 8         | 0.664         | 0.361      | Valid |
| 9         | 0.562         | 0.361      | Valid |
| 10        | 0.829         | 0.361      | Valid |
| 11        | 0.782         | 0.361      | Valid |

|    |       |       |       |
|----|-------|-------|-------|
| 12 | 0.740 | 0.361 | Valid |
| 13 | 0.677 | 0.361 | Valid |
| 14 | 0.833 | 0.361 | Valid |
| 15 | 0.698 | 0.361 | Valid |
| 16 | 0.660 | 0.361 | Valid |
| 17 | 0.808 | 0.361 | Valid |
| 18 | 0.703 | 0.361 | Valid |
| 19 | 0.433 | 0.361 | Valid |
| 20 | 0.480 | 0.361 | Valid |
| 21 | 0.623 | 0.361 | Valid |
| 22 | 0.768 | 0.361 | Valid |
| 23 | 0.749 | 0.361 | Valid |
| 24 | 0.706 | 0.361 | Valid |
| 25 | 0.623 | 0.361 | Valid |
| 26 | 0.862 | 0.361 | Valid |
| 27 | 0.623 | 0.361 | Valid |
| 28 | 0.712 | 0.361 | Valid |
| 29 | 0.758 | 0.361 | Valid |
| 30 | 0.742 | 0.361 | Valid |

|    |       |       |         |
|----|-------|-------|---------|
| 31 | 0.749 | 0.361 | Valid   |
| 32 | 0.928 | 0.361 | Valid   |
| 33 | 0.701 | 0.361 | Valid   |
| 34 | 0.328 | 0.361 | Invalid |
| 35 | 0.596 | 0.361 | Valid   |
| 36 | 0.427 | 0.361 | Valid   |
| 37 | 0.614 | 0.361 | Valid   |
| 38 | 0.623 | 0.361 | Valid   |
| 39 | 0.738 | 0.361 | Valid   |
| 40 | 0.778 | 0.361 | Valid   |
| 41 | 0.780 | 0.361 | Valid   |
| 42 | 0.716 | 0.361 | Valid   |

It can be seen from table 5 above that 41 items were considered as valid because the  $r_o$  value is higher than  $r_t$  0.361. There was only one invalid item, the item number 34.

## 2. Reliability

After doing a validity test, a reliability test was conducted. Reliability determines an instrument consistently measured in research and the reliable instrument is the instrument that can be trusted. Pallant (2001) as cited from Daud et al. (2018) is assumed, if the Cronbach's Alpha value is more than 0.6 means high reliability. Meanwhile, if the Cronbach's Alpha is lower than 0.6 considered as low reliability.

**Table 6.** Reliability Test Result

| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| .973                          | 41         |

The table above is the result of calculations from SPSS software with the Cronbach's Alpha value is 0.973. This value is higher than 0.6 that can be stated the instrument is highly reliable.

So from the result of the validity and reliability test, the ones used for the research were 24 items which were seen and selected based on the highest validity value and represented all indicators of each aspect. After ensuring the validity and reliability of the questionnaire, then the instrument, with the help of Google Form, was distributed to the respondents via WhatsApp or E-Mail to start collecting data. In the form, a demographic data of each student and questionnaire sections was provided that each respondent needs to answer. Data collection by paying attention to research ethics as it should be done, such as not mentioning the specific identity of respondents in the research, provides an understanding of the direction and purpose of the research before data collection.

#### D. Data Analysis

The data was analysed using descriptive statistics, which is a method of analyzing data in the form of numbers and is used to describe or explain a situation or event (Ananda & Fadhli, 2018). The collected data then calculated to find out the mean and standard deviation values based on four-point Likert scale from the students' answers, including Strongly Agree (SA) with four scores, Agree (A) with three scores, Disagree (D) with two scores, and Strongly Disagree (SD) with one score. The data score that collected then analysed with the help of Microsoft Excel software version 2010. The procedures are:

1. Open Microsoft Excel 2010 software and wait for the application to be opened completely.
2. When it opened, the data collected from the answers to the questionnaire in Google Form tabulated with a table per statement.
3. Analyze using one of the tools available in Excel, namely Data Analysis on the Data Toolbar, then select Descriptive Statistics.
4. Input the questionnaire results per item to get a more detailed analysis.
5. Then click Ok, and the statistical results are shown.

After the analysis with the help of Excel was done, then a descriptive analysis was carried out to determine student perceptions by looking at the interval scores interpretation from Sumartini (2017) cited from Hanggrasawani et al. (2024) below.

**Table 7.** Interval Scores Interpretation

| Interval    | Interpretation |
|-------------|----------------|
| 3.26 – 4.00 | Very Good      |
| 2.6 – 3.25  | Good           |
| 1.76 – 2.5  | Fair           |
| 1.00 – 1.75 | Poor           |

Source: (Hanggrasawani et al., 2024)



### E. Research Schedules

This research was conducted at a university in Tasikmalaya, West Java, Indonesia, by distributing questionnaires to participants. The research involved several stages, the implementation schedule of which is outlined in the research schedule table.

**Table 8.** Research Schedules

| <b>Description</b>                  | <b>Sept.<br/>/2024</b> | <b>Oct.<br/>/2024</b> | <b>Nov.<br/>/2024</b> | <b>Dec.<br/>/2024</b> | <b>Mei.<br/>/2025</b> | <b>June<br/>/2025</b> | <b>July<br/>/2025</b> |
|-------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Research<br>Proposal<br>writing     |                        |                       |                       |                       |                       |                       |                       |
| Research<br>Proposal<br>examination |                        |                       |                       |                       |                       |                       |                       |
| Data<br>Collection                  |                        |                       |                       |                       |                       |                       |                       |
| Data Analysis                       |                        |                       |                       |                       |                       |                       |                       |
| Report                              |                        |                       |                       |                       |                       |                       |                       |
| Thesis Result<br>Seminar            |                        |                       |                       |                       |                       |                       |                       |
| Thesis<br>Examination               |                        |                       |                       |                       |                       |                       |                       |