

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This study employed a descriptive quantitative research design. According to Ary et al. (2014), descriptive research is designed to describe the current status of a phenomenon by collecting and analyzing data from a particular population. Meanwhile, (Sugiyono, 2013) states that quantitative research is a research method based on the philosophy of positivism that uses numerical data and statistical analysis to describe a phenomenon objectively. Therefore, a descriptive quantitative design was considered appropriate for this study because it aimed to describe students' attitudes toward code-switching in English learning content on TikTok and their level of first language dependency based on numerical data obtained through questionnaires.

This definition has guided the formulation of the objectives of this current study. The objective of this study is to investigate the attitudes of EFL university students towards code-switching in the context of English-language learning material on TikTok by transforming students' reactions into numerical values.

Given the topic to be investigated in this study, a quantitative descriptive method is quite applicable. This method is helpful for the description of the phenomenon itself as well as the determination of the attitudes of students toward code-switching, whether they consider it positively or negatively. Using numbers makes it possible to reveal the general tendencies.

Another reason for choosing this design is the characteristic of the attitude variable itself. It consists of various elements that can be quantified, such as agreement, perception, and preference. This method allows us to gather students' reactions in a systematic way, thus making conclusion more feasible.

Also, in the current study, it is intended to investigate the extent to which students depend on their native language while using English learning materials involving code-switching on TikTok. The use of a quantitative research design enables us to identify such a tendency in the larger group of participants rather than focusing solely on personal experience.

A descriptive quantitative research design was selected as it enables systematic measurement of students' attitudes and facilitates clear, organized data analysis consistent with the study's objectives.

B. Research Location and Time

This study involved undergraduate EFL learners from a Teacher Training and Education program at a private university in Bandung, Indonesia. The participants were selected based on their active use of TikTok and their exposure to English learning content that used code-switching.

Given the focus of this study, data were collected through a combination of online and offline approaches. This approach was selected for its practicality and relevance to research on digital media use, while also ensuring a sufficient number of responses. The questionnaire was distributed using Google Forms, both online via digital platforms and offline, with participants completing the same form in person under the researcher's guidance. However, the majority of responses were obtained through the online distribution. Data collection was conducted over approximately 3.5 weeks, from May 9 to June 2, 2026, during which responses were gathered from participants.

C. Population and Sample

All students from the Faculty of Teacher Training and Education at a private university in Bandung, Indonesia, were involved in the study; they represent different programs, varying levels of English competence, and different levels of social media use. In the current research, the term 'EFL students' is defined in a sociolinguistic context rather than in terms of students' specific majors. Thus, the notion of EFL students encompasses all those who learn and master English in settings where English is not the native language of everyday communication. Hence, students studying non-English education majors in the given faculty can be rightfully called EFL learners, since they all use English as a foreign language for educational purposes, online media, and social interactions on TikTok. Purposeful sampling was employed in the current research in order to choose the participants who met the set of criteria. After screening, 92 respondents were recruited to participate in the study; however, only 71 met the set criteria.

As prospective educators, students of the Faculty of Teacher Training and Education are expected to be familiar with various learning strategies and educational technologies, including the use of social media platforms for learning. In addition, students from different study programs may have varying levels of English proficiency and learning experiences, which allows the researcher to obtain broader perspectives on the use of code-switching in English-learning content on TikTok.

A sample was selected to represent the population in this study. Purposive sampling was employed, with participants selected according to criteria aligned with the study's objectives. This approach was adopted because not all students had relevant experience related to the research focus; therefore, only those who met the established criteria could provide appropriate and accurate data.

The inclusion criteria for this study comprised students from all study programs within the Faculty of Teacher Training and Education who actively used social media, particularly TikTok, and had experience viewing English learning content that incorporated code-switching. Two screening questions were placed at the beginning of the Google Form questionnaire to determine respondents' eligibility. Using the form's built-in branching (skip logic) feature, respondents who answered "No" to either screening question were automatically directed to the end of the form and were unable to proceed to the main questionnaire, whereas those who answered "Yes" to both questions continued to complete the full set of items.

The target population for this study comprised all students within the Faculty of Teacher Training and Education. The strategy was chosen in order to gain a thorough insight into the attitudes of students towards code-switching in English learning content on TikTok. The students in question are future teachers with an academic background in education but come from different subjects and vary in their English fluency.

D. Research Instruments

The instrument used in this study is a questionnaire. A questionnaire has been used as the instrument to measure students' attitudes towards code-switching in English-language learning materials on TikTok. The questionnaire will consist of several statements rated on a Likert scale ranging from "strongly agree" to "strongly

disagree." Likert scale is an instrument commonly used in research to measure people's attitudes, opinions, or perceptions.

The instrument used in the current study has been designed through a theoretical understanding of attitude as per attitude theory and, more specifically, the use of the tripartite attitude structure as introduced by Gardner (1985). The basic premise of this approach is that attitude is made up of three main parts, which include cognitive, affective, and behavioral attitudes.

With reference to the theory, the questionnaires have been formulated to include the three dimensions of the model. The statements in each have been designed to cover the cognitive, affective, and behavioral dimensions, making the instrument capable of measuring the students in a much better way. To ensure the instrument's quality, content validity was achieved by developing statements grounded in the theoretical foundation and informed by consultations with the academic supervisor. The reliability of the instrument has been tested as well to ensure consistency of results.

E. Instrument Validity

The data collection tool used in this study is a questionnaire that comprises five-point Likert-scale questions based on Gardner's threefold attitude theory that includes cognitive, affective, and behavior aspects. To ensure the reliability of the questionnaire, validation using expert judgment method was conducted by two experts in English language education. The criteria used for selecting the experts were their qualifications, teaching experience, and expertise in relation to the topic under investigation. The first expert was a certified lecturer who has been teaching English language for more than 20 years, specializing in ESP, linguistics, and academic writing. The second expert was a lecturer with specialization in English language teaching and evaluation.

Table 3.1 Case Processing Summary

		N	%
Cases	Valid	71	77.2
	Excluded ^a	21	22.8
	Total	92	100.0

a. Listwise deletion based on all variables
in the procedure.

Table 3. 2 **Reliability Statistics**

Cronbach's Alpha	N of Items
.881	22

However, for the assessment of the reliability of the instrument, a reliability test was conducted through the calculation of the Cronbach's Alpha coefficient. An instrument is said to be reliable and has a high level of internal consistency if its Cronbach's Alpha is above 0.70 (Hair et al., 2019). According to the results, the questionnaire used in this research has a high level of reliability since its Cronbach's Alpha is 0.881, which is higher than 0.70.

F. Research Procedure

The study was conducted using systematic procedures. The first step involved preparation, during which the research topic was determined, the problem statement was formulated, and a questionnaire was developed based on various theoretical perspectives.

The next stage included collecting data. In this case, the questionnaire was administered to the students of the Faculty of Teacher Training and Education of the private university in Bandung, who met the research criteria - EFL students who watched English learning material on TikTok that contained code-switching. Students were asked to answer the questions based on their experience and views. The questionnaire was administered through Google Form for about 3.5 weeks (May 9 - June 2, 2026). In the final step, the collected data were analyzed quantitatively. The data analysis helped in addressing the research questions regarding students' attitudes towards code-switching.

G. Data Analysis Techniques

The descriptive statistics approach was used in analyzing the data from the questionnaire in order to uncover the attitudes of the students towards content use in English language learning on TikTok. The collected data was analyzed by determining the mean scores of each individual question as well as of each of the

aspects cognitive, affective, and behavioral. Moreover, the collected data was presented using categorical levels to make the respondents' answers more understandable. The descriptive statistics were chosen in order to correspond to the research objectives of description and explanation of the students' attitudes, not the relationships between the variables.

The data were analyzed using IBM SPSS Statistics 27. Descriptive statistics, such as frequencies, percentages, and means, were employed to examine students' attitudes toward code-switching and their reliance on their first language. To determine the average score of each questionnaire item and research variable, the researcher calculated the mean score using the following formula:

$$\bar{X} = \frac{\sum X}{N}$$

Where:

- $\bar{X}$ = Mean score
- $\sum X$ = Total score obtained from all respondents
- N = Number of respondents

The mean scores were then interpreted using predetermined interval categories to identify the level of students' attitudes toward code-switching and their first language dependency.

$$\text{Interval Width} = \frac{\text{Highest Score} - \text{Lowest Score}}{\text{Number of Categories}}$$

$$\text{Interval Width} = \frac{5 - 1}{5}$$

Based on the calculation, the mean scores were classified into five categories: Very Low (1.00–1.80), Low (1.81–2.60), Moderate (2.61–3.40), High (3.41–4.20), and Very High (4.21–5.00). These categories were used to interpret respondents' attitudes toward code-switching and their level of first language dependency.