

CHAPTER 3

RESEARCH PROCEDURE

This chapter presents the methodology employed in this research to conduct the research. It describes five main parts of research procedures, namely research method, participant and setting, data collection, data analysis, and research schedule.

3.1 Research Design

In this research, the researcher used case study. Case study method enables a researcher to closely examine the data within a specific context. Yin (2003), pointed out that case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between an object of study and context are not evident. The researcher used this case study because the researcher investigated the use of Duolingo in English learning vocabulary.

3.2 Setting and Participant

In this research, the researcher will choose students at junior high school level. They are chosen because they have experience in vocabulary using Duolingo. They are also willing to join and support my research project. The students from ranking high, middle, and low were asked to participate in my research. There are two girls and one boy. The majority of the students are either 15 or 16 years old. Before collecting the data, each of the participants was asked to read, fill and sign the consent form. This is necessary to ensure that participants

allow the researcher to analyze the data gained from the data collection process and to use it for publication purposes while keeping the participants' privacy. All data were confidentially collected due to research ethics.

3.3 Data Collection

The data was collected through interviews. The researcher used semi-structured interviews. Semi-structured interviews offer a considerable amount of leeway to the researcher to probe the respondents along with maintaining a basic interview structure. Cook (2008) and Kvale (1996), stated that a semi-structured interview is neither a structured "questionnaire" with preconceived questions nor an unstructured conversation with no prescribed topics, it is a conversation where the interviewee makes account of his/her subjective experiences related to the theme introduced by the researcher, and the interviewer attempts to explore these experiences for further details worth of analysis. The participants will be interviewed about their perception of Duolingo, especially the benefits of Duolingo.

3.4 Data Analysis

The result was analyzed by using thematic analysis. Thematic analysis is one way to analyze data to identify patterns or to find themes through the data that the researcher has collected. The researcher comprehended the data and arranged the data. Braun and Clarke (2006), argued that thematic analysis is a useful method for examining the perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights. King (2004), stated that Thematic analysis is also useful for summarizing key

features of a large data set, as it forces the researcher to take a well-structured approach to handle data, helping to produce a clear and organized final report. Braun & Clark (2006) stated that there are six phase approach to thematic analysis, as follows:

1. Familiarizing the data:

In this section, the researcher made the data transcript and data translation into English. Then, the researcher read the data until familiar with the data. Thus, the researcher gained an understanding about the data and chose the best code for each data.

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Time	Transcript of Participant (Researcher (R) and Participant (P))		Initial Code
16 August 2021	R	Apakah sebelumnya anda tahu apa itu Duolingo Aplikasi?	Did you know what is Duolingo application before?
	P	Belum pernah tau. Karena dulu saya belajar bahasa Inggris dengan membaca buku dan mendengarkan musik. Saya mulai tau Duolingo dari pak Noma di sekolah, dia mengenalkan Duolingo itu apa dan apa manfaat belajar bahasa Inggris menggunakan Duolingo. Setelah itu saya langsung mendownload dan mencoba belajar menggunakan Duolingo.	Never. Because i learn English language with reading books and listening to music. I know Duolingo from Mr. Noma at school. He introduced what is Duolingo and what is the benefit of learn English by using Duolingo. After that, I Downloaded it and tried to used Duolingo.

Figure 1. Transcript of interview

2. Generating initial code:

After being familiar with the data, the researcher started to classify the data into several codes. Thus, the data is organized with all the codes and relevant data extracts.

	R	Apakah anda percaya ketika anda menggunakan Duolingo dapat membantu anda untuk mengembangkan vocabulary anda?	Do you believe that when you use Duolingo will help you to develop your vocabulary?	
	P	Percaya, karena saya juga belajar dari duolingo, jadi bisa belajar kosa kata bahasa inggris dengan sangat mudah dan gampang dimengerti. Oleh karena itu, saya sangat senang karena belajar bahasa inggris menggunakan Duolingo dan saya belajar menggunakan aplikasi duolingo setiap hari dirumah setiap malam hari.	I believe. Because I have learn it. So, I can learn vocabulary easily and understandable. I'm very happy because I learn English with Duolingo and I study at home using duolingo application every night.	Learning Enthusiasm Student English
	R	Fitur fitur apa yang anda sukai dari Duolingo?	What kind of features do you like from Duolingo?	
	P	Saya suka belajar dari	I like study vocabulary from	Interesting

Figure 2. Coloring the codes

3. Searching for themes:

4. In this stage, the researcher focused on the broader level of themes and involved sorting the different codes into potential themes.

Themes	Coding data	Data
Provide attractive features and easy to use	Provide attractive features and easy to use	<p>(P1) mudah dipahami karena di bantu dengan gambar yang lucu yang memudahkan kita agar gampang untuk diingat. Terus ada voice dan audionya</p> <p>(P2) Aku suka belajar vocabulary karena di bantu dengan gambar yang mudah dimengerti. Tetapi yang paling aku suka adalah ada voice nya</p> <p>(P3) Lebih suka kepada kosa kata karena bergambar. Terus ada juga cara pengucapannya melalui voice.</p>
Affecting students emotion	Learning enthusiasm	<p>(P1) .saya sangat senang dan saya belajar menggunakan aplikasi duolingo setiap hari dirumah setiap malam hari.</p> <p>(P2) . Saya belajar dari dasar, binatang, dan tumbuhan karena mudah di mengerti dan sangat asik karena ada gambarnya, dan juga ada audio untuk pengucapan yang benarnya bagaimana. Saya selalu belajar bahasa inggris menggunakan Duolingo setiap hari.</p> <p>(P3) saya bisa belajar kosa kata karena menggunakan duolingo, saya juga belajar setiap sebelum saya tidur, karena menurut saya kosa kata adalah yang paling susah untuk dihafal menurut saya.</p>

Figure 3. Grouping the codes

5. Reviewing themes:

In this phase, the researcher reflected on whether the themes tell a convincing and compelling story about the data, and began to define the nature of each theme, and the relationship among the themes.

Themes	Coding data	Data
Provide assisting Spelling and Meaning	Assisting Spelling and Meaning	<p>(P1) Duolingo dapat membantu saya dalam meningkatkan spelling dan arti dari kata tersebut</p> <p>(P2) Duolingo membantu banget saya dalam mengetahui arti dari kata tersebut dan cara mengejanya gimana</p> <p>(P3) duolingo itu berpengaruh kepada ... pembelajaran vocabulary saya terutama kepada cara mengejanya dan artinya apa</p>
Affecting students emotion	Students' Perception	<p>(P1) saya sangat senang karena belajar Bahasa Inggris menggunakan Duolingo</p> <p>(P2) Seneng banget, karena ini bisa membantu dalam belajar bahasa Inggris</p> <p>(P3) Saya senang karena dengan aplikasi duolingo saya bisa belajar kosa kata karena menggunakan duolingo</p>

Figure 4. Reviewing the themes

6. Defining and naming:

7. The researcher wrote the themes to be analyzed next and analyzed the data within them.

Providing Advantageous Features in supporting students vocabulary learning
Promoting students motivation in learning vocabulary
Assisting students to Improve their Spelling and Meaning

Figure 5. Naming the themes

8. Producing the report:

The researcher provided a compelling story that is coherent, logical, and valid about the data based on the analysis.

3.5 Research Schedule

Table 1. Research Schedule

No	Description	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022
1	Research proposal writing	■						
2	Research proposal examination				■			
3	Data collection					■		
4	Data analysis						■	
5	Report						■	
6	Thesis Examination							■

