

CHAPTER 3

RESEARCH PROCEDURES

A. Method of the Research

This study employed a qualitative descriptive design to explore undergraduate students' perceptions of Mendeley in academic referencing. A qualitative descriptive study method can be employed to obtain detailed information about events (Sandelowski, 2010). When the goal of the research is to identify and describe a process, a phenomenon, or the ideas or perspectives of the participants, a qualitative descriptive design is appropriate (Caelli et al., 2003). Therefore, the qualitative descriptive method was employed to explore the perceptions of undergraduate students regarding Mendeley in managing academic references during the writing of research proposals in the qualitative course.

As previously stated, the Technology Acceptance Model (TAM) comprises five constructs: perceived ease of use, perceived benefits, attitude toward use, interest in use, and actual system use. However, the model has been modified in various studies. In this context, the TAM model has been modified on several occasions. The TAM model was developed by combining the behavioral intention and actual system use into the acceptance variable (Kim & Chang, 2007). Consequently, the TAM model used in this research follows Al-Gahtani (2001) and consists of three variables: perceived usefulness, perceived ease of use, and acceptance (see Table 1).

Table 1. Technology Acceptance Model (Al-Gahtani, 2004)

No	Item	Indicator
1.	Perceived Usefulness	Accelerate work Improved performance Increase productivity Effectiveness Simplify work

No	Item	Indicator
		Helpful
2.	Perceived Ease of Use	Easy to learn Can be controlled Clear and understandable Flexible Easy to be skilled Easy to use
3.	Acceptance	Real use Frequency of use User satisfaction Recommended other users

B. Focus of the Research

This research focused on exploring undergraduate students' perceptions of using Mendeley as a reference management tool in the context of writing research proposals for the qualitative research course. Specifically, the research seeks to understand how students perceive the usefulness, ease of use, and overall acceptance of Mendeley in assisting academic referencing.

C. Setting and Participants

The research was conducted at one of the universities in Tasikmalaya, West Java, Indonesia. This setting was selected because students are required to write research proposal, which involve managing academic references. This makes this setting relevant for exploring their perceptions of Mendeley as a reference management tool. The participants in this research were purposively selected from the class of 22 undergraduate students majoring in the English Education Department. The selection was based on specific criteria to ensure that the participants are relevant to the research objectives. The criteria include that they must be currently enrolled as undergraduate students in the English Education

Department, have utilized Mendeley for academic referencing in the qualitative research proposal assignment, and have been using Mendeley for at least one semester.

Subsequently, two participants who best met the criteria were selected for in-depth interviews. The decision to involve two participants was made to enable detailed and in-depth exploration of their perceptions through their use of Mendeley in managing references when writing research proposals in the qualitative research course, thereby ensuring the collection of rich qualitative data while maintaining the study's validity. Limiting the number of participants supports the collection of rich qualitative data, as qualitative research focuses more on depth and detailed perception than on large sample sizes (Creswel, 2014).

Prior to the interview process, participants were provided with consent forms to ensure that they were informed about the study's purpose and data confidentiality policy. They were also assured of their right to privacy, security, and to withdraw from the study at any time. To ensure anonymity, any identifying information was removed from the transcripts, and the data were reported using pseudonyms. All information was stored securely and used only for research purposes. These procedures were implemented to ensure that the study met ethical standards of research.

D. Data Collection

The data were collected through an open-ended format of semi-structured interviews conducted online to gather comprehensive qualitative data from the selected participants. Open-ended questions allow participants to freely express their thoughts in their own words rather than selecting from predetermined options. This approach enables the collection of more authentic and nuanced responses because it does not limit participants to researchers' expectations. One of the benefits of open-ended questions is that they encourage spontaneous answers, which can reveal unexpected insights. Additionally, this format supports the

collection of rich, varied data and provides a deeper understanding of the participants' perspectives (Reja et al., 2003)

A total of two in-depth interviews were conducted online to facilitate participation and accommodate the diverse locations of the participants, ensuring that they can engage in the process comfortably and conveniently, which can enhance the quality of discussion. Although the number of participants is limited to two, each interview provided detailed and meaningful information about their perceptions of using Mendeley in managing references for writing research proposal. This enabled the collection of rich qualitative data, because its main focus is on the depth of participants' perspectives rather than the number of interviews. The interview questions in this study were developed based on the Technology Acceptance Model (TAM) proposed by Al-Gahtani (2001), which includes the constructs of Perceived Usefulness, Perceived Ease of Use, and Acceptance.

Questions related to Perceived Usefulness focus on exploring whether participants find Mendeley helpful in enhancing performance in academic referencing tasks, particularly in proposal writing. Questions related to Perceived Ease of Use aim to know the participants' perceptions of how easy or difficult it is to learn and operate. Lastly, the acceptance questions are designed to investigate the participants' overall willingness to continue using Mendeley and whether they would recommend it to others based on their perceptions.

E. Data Analysis

The data collected from interviews were analyzed through the lens of thematic analysis, a highly suitable technique for identifying, analyzing, and reporting patterns (themes) within data. It serves to organize and describe data sets in detail, thereby facilitating the identification of patterns and themes (Braun & Clarke, 2006). This analysis will facilitate the uncovering of core themes that reveal students' perceptions, particularly in regard to its usability, benefits, challenges, and overall satisfaction. This study followed Braun and Clarke's (2006) six-phase

framework for thematic analysis, which guided the data analysis process, as outlined below:

1. Familiarizing the Data

During this phase, the researcher became familiarized with the data by transcribing the interview, reading and re-reading the transcripts carefully, and taking initial notes or ideas for coding that could further developed in the subsequent phases.

2. Generating Initial Codes

During this phase, the researcher systematically coded interesting features across the entire data set and collated all data relevant to each code. Key, phrases, ideas, and concepts were identified and categorized, enabling the researcher to highlight the most significant aspects of the data for the study.

Table 2. Generating Initial Codes

Extracts	Initial Codes
P2: Menurut saya, Mendeley ini sangat mempermudah saya dalam proposal kualitatif saya.	Positive perception of ease of use
P1: Untuk format dalam Mendeley itu menyesuaikan dengan apa yang kita mau. Misalnya untuk APA 7 th style, jadi Mendeley itu menyesuaikan dengan style citation yang kita mau.	Flexibility of use
P2: Menurut saya Mendeley lebih mudah dan mempersingkat waktu ya, daripada kita membuat referensi citasinya itu secara manual. Kalau pakai Mendeley malah lebih	Time efficiency

Extracts	Initial Codes
<p><i>singkat juga dan lebih gampang juga sih menurut saya.</i></p>	
<p>P1: <i>Untuk fitur yang tidak familiar itu ada, namun hanya awal-awal. Tapi setelah lama menggunakan, saya rasa tidak ada kebingungan.</i></p>	<p>Ease of use after getting used to the tool</p>
<p>P1: <i>Untuk awal-awalnya itu kebingungan ya. Maksudnya seperti apa fiturnya.</i></p>	<p>Initial difficulties in using Mendeley</p>
<p>P1: <i>Saya harap teman-teman di balik adanya tools ini juga tetap wajib meng-cross-check dan menyesuaikan citation style apa yang di-required untuk tidak terjadi bentuk bentuk semacam kesalahan-kesalahan kecil dalam penulisan referensi.</i></p>	<p>Need for verification and evaluation of automated output</p>
<p>P1: <i>Bagi saya, untuk fitur di Mendeley itu, tidak ada yang susah. Jadi dapat dimengerti semua.</i></p>	<p>Ease of understanding features</p>
<p>P2: <i>Terbantu banget dengan Mendeley. Setelah tahu dari tutor-tutor YouTube, malah jadi terbantu banget.</i></p>	<p>Learning through tutorials and guidance</p>
<p>P1: <i>Paling bagi saya itu ketika kita masukkan add file, misalnya masuk ke library, misalnya kita research artikelnya mengenai CDA, tulis saja di library kita CDA, nanti kita masukkan referensi yang sesuai dengan topik kita, lalu masukkan. Maksudnya untuk masukkan ini kita tinggal langsung saja add file. Dari add file kita masukkan. Mereka langsung meng-operate.</i></p>	<p>Benefits of Mendeley features in referencing process</p>

Extracts	Initial Codes
P1: <i>Sangat puas sekali. Karena, jujur saja, itu benar-benar terbantu. Jadi, sangat disayangkan bagi teman-teman yang tidak mencoba tools ini.</i>	Overall user satisfaction and recommendation
P2: <i>Selain itu juga saya mencoba fitur-fiturnya yang ada di Mendeley sendiri, seperti add folder, add file yang kayak gitu.</i>	Independent feature exploration
P1: <i>Karena, saya pikir dibandingkan manual sekarang kan banyak ya. Maksudnya, kita melihat zaman sekarang, misalnya mencantumkan referensi langsung dari AI itu saya rasa emang itu kayak ada dishonesty berhubungan etika akademik ya.</i>	Academic ethics and trust towards Mendeley
P2: <i>Bisa dibilang hampir selalu pakai sih ketika ada tugas-tugas yang bersangkutan dengan referensi.</i>	Habitual use of Mendeley

The researcher identified 13 initial codes, each representing different aspects highlighted in the participants' interview transcriptions. Here is a list of initial codes and their frequencies.

Table 3. Calculating Initial Codes

No	Initial Codes	Total
1.	Positive perception of ease of use	5
2.	Flexibility of use	8
3.	Time efficiency	5
4.	Ease of use after getting used to the tool	4
5.	Initial difficulties in using Mendeley	2
6.	Need for verification and evaluation of automated output	1
7.	Ease of understanding features	2

8.	Learning through tutorials and guidance	5
9.	Benefits of Mendeley features in referencing process	1
10.	Overall user satisfaction and recommendation	3
11.	Independent feature exploration	1
12.	Academic ethics and trust towards Mendeley	1
13.	Habitual use of Mendeley	1

3. Searching for Themes

The third phase, the researcher organized the initial codes into potential themes by grouping related codes together and gathering all relevant data associated with each theme.

Table 4. Searching for Themes

Initial Codes	Potential Themes
Time efficiency Benefits of Mendeley features in referencing process Academic ethics and trust towards Mendeley	Perceived Functional Benefits of Using Mendeley
Positive perception of ease of use Flexibility of use Ease of use after getting used to the tool Initial difficulties in using Mendeley Ease of understanding features Learning through tutorials and guidance Independent feature exploration	Ease of Use and Familiarization with Mendeley
Overall user satisfaction and recommendation Habitual use of Mendeley Need for verification and evaluation of automated output	User Satisfaction and Acceptance of Mendeley Ensuring Accuracy in Automated Citation Tools

4. Reviewing Themes

The fourth phase, the researcher reviewed all themes that have been identified previously during the coding and theme search process. This phase ensuring each theme truly represents the coded data and aligns with the focus and aim of the research.

5. Defining and Naming Themes

During this phase, the researcher clearly defined and named each theme to ensure that it accurately represented the key ideas found in the data.

Table 5. Defining and Naming Themes

Perceived Functional Benefits of Using Mendeley	This theme describes the participants' perception of the direct advantages of utilizing Mendeley in the process of composing references, particularly in terms of accelerating work, improving performance, simplifying work, helpfulness, and the role of key features. These advantages make the process of writing citations easier and more practical.
Ease of Use and Familiarization with Mendeley	This theme describes students' perceptions of the ease of use of Mendeley, particularly in terms of being easy to learn, controllable, clear and understandable, flexible, easy to learn, and easy to use.

User Satisfaction and Acceptance of Mendeley	This theme represents user satisfaction levels. Furthermore, this theme also reflects students' acceptance of Mendeley as the primary tool for managing references. This is demonstrated through frequency of use and a desire to recommend it to others.
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Ensuring Accuracy in Automated Citation Tools	This theme describes students' awareness and caution regarding the limitations of automatic features in the Mendeley application. This theme reflects students' reflective attitude of not relying entirely on technology without actively engaging in the writing process.
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6. Producing the Report

In this final phase, the researcher selected relevant data extracts, conducted a comprehensive analysis of those extracts, and examined the findings in relation to the research question and existing literature. This stage includes the final development of themes and the writing of a scientific report to present the comprehensive analysis.

F. Research Steps

Table 6. Research Steps

Step	Description
1.	Identifying the phenomenon
2.	Determining the research focus
3.	Writing the research proposal
4.	Proposal examination
5.	Data collection
6.	Data transcription
7.	Data analysis (thematic analysis)
8.	Writing the final report

G. Time and Place of the Research

This research conducted at a university in Tasikmalaya, West Java, Indonesia, was carried out through several stages according to the schedule outlined below:

Table 7. Research Timeline

Activities	Month												
	Agt 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Agt 2025	Oct 2025
Research Proposal Writing													
Research Proposal Examination													
Data Collection													
Data Analysis													