

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter discussed the research method, research subjects, instruments and data collection technique, and data analysis technique.

#### A. Research Method

To gain a comprehensive understanding of the impact of social media utilization on English language teaching, the systematic review method was selected as the most suitable approach for synthesizing current empirical research studies. This chapter provides a detailed account of the procedures employed to search for and analyze published studies on the topic.

In this chapter, the researcher discussed the step-by-step procedures used to search for and analyze published studies focusing on the use of social media in English language teaching. To ensure a thorough and reliable review, the researcher followed the guidelines provided by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow diagram, as shown in Figure 3.1. This diagram visually represents the analysis of the empirical studies included in this systematic review.

The PRISMA flow diagram serves as a helpful tool to understand how information progressed throughout the different stages of the review process. It outlines the key steps involved, such as identifying relevant publications, determining which ones to include or exclude based on specific criteria, and providing reasons for exclusions. By presenting the number of articles identified, included, and excluded, along with the reasons behind exclusions, the flow diagram ensures a systematic and transparent approach to collecting data. Ultimately, this process helps to achieve accurate and reliable results in our review.

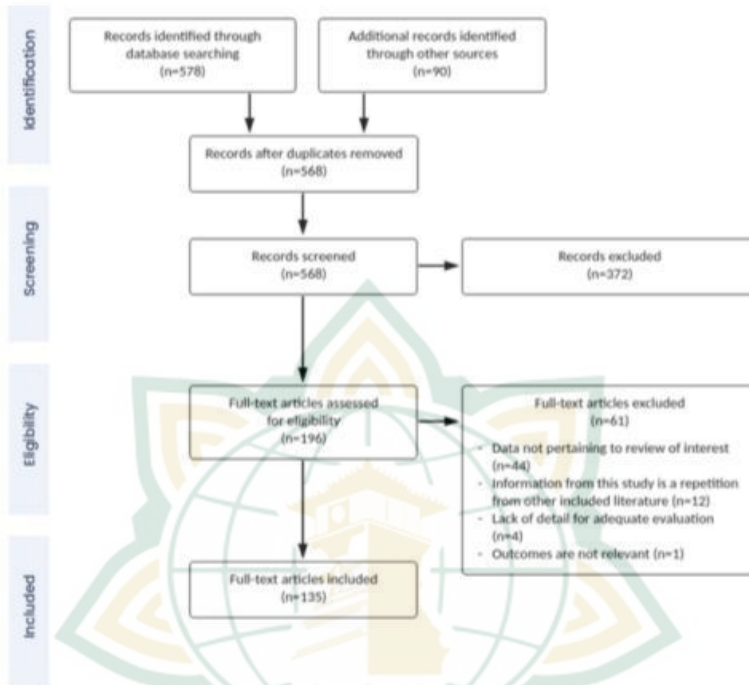


Figure 3.1. Systematic Review (PRISMA) Flow Diagram.

To gathered a comprehensive set of articles for the meta-analysis, the researcher utilized the Publish or Perish tool, which is a software application that enables the retrieval and analysis of academic publications from Google Scholar. Publish or Perish is a valuable resource for researchers as it allows them to search and access a vast array of scholarly articles, including those that may not be easily accessible through traditional academic databases. This tool enables the researcher to retrieve articles based on relevant keywords, author names, or specific journals, enhancing the comprehensiveness of the literature review.

By employing the Publish or Perish tool, the researcher ensured a rigorous and systematic approach to identifying relevant articles for the meta-analysis. This tool enables the retrieval of articles from Google Scholar, a widely used academic search engine that encompasses a vast range of disciplines and sources. The ability to search based on specific criteria, such as keywords and author names, facilitates the identification of relevant studies that contribute to the research question at hand. Furthermore, the utilization of Publish or

Perish enhances the efficiency and accuracy of the literature search process, saving time and minimizing the risk of missing key articles.

In this research, the researcher used the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) 2019 flow diagram. Although the PRISMA 2020 flow diagram was published more recently, the researcher initiated the research in 2020, before the publication of the PRISMA 2020 version. Furthermore, considering the specific requirements of this study, the researcher considered the PRISMA 2019 flow diagram more appropriate and aligned with the objectives of the research.

By following the established guidelines and utilizing the PRISMA flow diagram, this systematic review ensures a rigorous and organized approach to examining the impact of social media utilization on English language teaching. The meticulousness and suitability of this methodology contribute to the reliability and validity of the research outcomes.

This research employed a systematic review methodology, which involves a comprehensive literature review guided by a specific research question. Systematic reviews utilize rigorous and systematic methods to determine which studies from the existing literature should be considered. 1 They enable the examination of previous research findings for consistency and generalizability across different fields or samples. In contrast, traditional literature reviews are often less organized and systematic, relying on a narrower selection of databases for article retrieval. 2

For this study, a recent five-year time span from 2016 to 2021 was chosen based on Hwang and Tsai's (2011) retrospective research inclusion and exclusion criteria. The investigation aimed to effectively explore trends in educational technology. The research focused on articles as the document type and selected publications from Google Scholar, which is widely regarded as a reliable and extensively used source. The research area was refined to educational research, applying stringent criteria akin to closely related reviews conducted for this research.

In order to ensure a standardized and rigorous approach, this research employed the Preferred Reporting Items for Systematic

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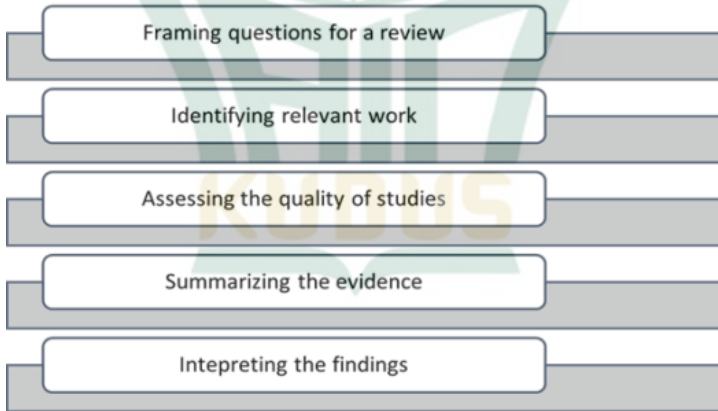
<sup>1</sup> Timothy J. Wilt and Howard A. Fink, "Systematic Reviews and Meta-Analyses," *Clinical Research Methods for Surgeons*, no. February (2007): 311–25, [https://doi.org/10.1007/978-1-59745-230-4\\_18](https://doi.org/10.1007/978-1-59745-230-4_18).

<sup>2</sup> Priscilla Robinson and John Lowe, "Literature Reviews vs Systematic Reviews," *Australian and New Zealand Journal of Public Health* 39, no. 2 (2015): 103, <https://doi.org/10.1111/1753-6405.12393>.

Review and Meta-Analysis (PRISMA) checklist. Originally developed for health studies, this checklist has been expanded to cover social and educational research as well. Its implementation proved to be invaluable in the planning and execution of this systematic review, offering clear guidance to the researchers in terms of data collection, organization, and analysis of the journal articles under review.

To gather the articles for this systematic review, comprehensive searches were conducted in Google Scholar databases. The objective of this review was to establish practical guidelines and directions for the effective use of social media in English as a Foreign Language (EFL) instruction. By thoroughly examining a wide range of relevant articles, this paper investigates the feasibility, various approaches, innovative ideas, and prevailing perceptions related to the utilization of social media for English as a Foreign Language (EFL) students.

To facilitate the systematic review process, this study adhered to a series of specific steps proposed by Khan. These steps can be categorized into five main phases: framing the research question, identification of relevant studies, assessment of the selected studies, summarizing the findings, and interpreting the results. The figure below visually presents the sequential nature of these steps, offering a clear overview of how the systematic review was conducted in this study.



*Figure 3.2. Phases of Systematic Literature Review.*

**Phase 1 : Framing Questions**

The ongoing COVID-19 pandemic has prompted educators to explore new and inventive approaches to engage learners in language learning. Consequently, there has been an increased awareness among educators regarding the potential benefits of

utilizing social media platforms. This research aims to shed light on the subject by analyzing articles published between 2016 and 2021, offering a comprehensive view of the diverse applications of social media in English language teaching and learning.

**Phase 2 : Identifying Relevant Work**

For the second phase of this research's systematic review, Google Scholar was selected as the primary database. Google Scholar serves as a comprehensive platform within the broader Google search index, encompassing a wide range of peer-reviewed articles and full-text publications across various subject areas. The database also incorporates academic sources such as technical reports, theses, books, and recognized web pages.

In the initial step of phase two, the focus was on identifying articles that aligned with the predetermined inclusion and exclusion criteria set for the review. These criteria served as guidelines to ensure that only relevant and appropriate articles were considered for further analysis.

*Table 3.1. Keywords used in the selection of relevant journals.*

Database	Search Term
Google Scholar	Social media, TikTok, Instagram, ELT, English Language Teaching, ELT Classroom, Listening, Speaking, Reading, Writing, Grammar

**Phase 3 : Assessing the quality of studies**

To ensure the selection of relevant articles within the review framework, a comprehensive set of criteria was established to guide the process. The eligibility and exclusion criteria were identified to ensure the inclusion of suitable articles for the final review.

The selected articles needed to fulfill specific requirements to meet the eligibility criteria. Firstly, they had to be recent, falling within the timeframe of 2016 to 2021. Moreover, the articles had to focus specifically on the utilization of social media in English language teaching. Additionally, they had to undergo the rigorous process of peer review and be readily available in full text. In terms of research design, quantitative, qualitative, and mixed-method studies were all considered.

Conversely, the exclusion criteria were designed to exclude certain types of sources from the review process. This included books, book chapters or series, as well as articles derived from conference



proceedings. Articles published prior to 2016 or after 2021 were also disregarded. Moreover, articles exploring social media in a general context, unrelated to language teaching, were excluded from the review.

For a concise overview of the eligibility and exclusion criteria, please refer to Table 3.2.

*Table 3.2. The eligibility and exclusion criteria.*

<b>Criteria</b>	<b>Eligibility</b>	<b>Exclusion</b>
Literature Type	Journal (research articles) <ul style="list-style-type: none"> <li>- Educational research</li> <li>- Social media utilization for English language teaching</li> <li>- Writing, listening, reading, speaking, grammar</li> <li>- Peer reviewed and full text</li> <li>- Quantitative, qualitative, and mixed method research methodologies</li> </ul>	Book, book chapters, conference proceedings, access denied, thesis, dissertation. <ul style="list-style-type: none"> <li>- Non-educational research</li> <li>- Did not focus on social media use for ELT classroom</li> </ul>
Language	English	Non-English
Timeline	Between 2016-2021	Before 2016, after 2021

The established criteria played a crucial role in shaping the scope of the article search and providing a clear direction for the review. These criteria served as a framework to ensure that the search efforts were focused on identifying articles that met specific requirements and were relevant to the research objectives. By defining the scope through these criteria, the review was able to maintain a targeted approach and ensure that only appropriate articles were included for analysis.

**Phase 4 : Summarizing the evidence**

To conducted this review, Google Scholar was utilized as the database to search for relevant articles. A total of 170 articles were initially identified based on the eligibility and exclusion criteria, using specific keywords relevant to the review topic. In the first round of

screening, 88 articles were excluded based on the designated time frame, leaving 82 articles for further evaluation.

In the second round of screening, additional filters were applied to refine the selection. Literature review articles, paper proceedings, conference proceedings, books, book chapters, theses, dissertations, and articles with restricted access were excluded, resulting in 35 remaining articles. From this set, articles that were not in the English language were removed, leaving 33 articles.

Further screening was performed to ensure the research areas of the remaining articles aligned with the focus of educational research. As a result, 28 articles remained for analysis, which were subsequently evaluated using the eligibility and exclusion criteria. Ultimately, 19 articles were excluded as they did not meet the specified criteria.

The flowchart in Figure 3.3., titled "Searching procedures following PRISMA," provided a visual representation of the selection process, showcasing the stages of article screening and the number of articles at each stage.



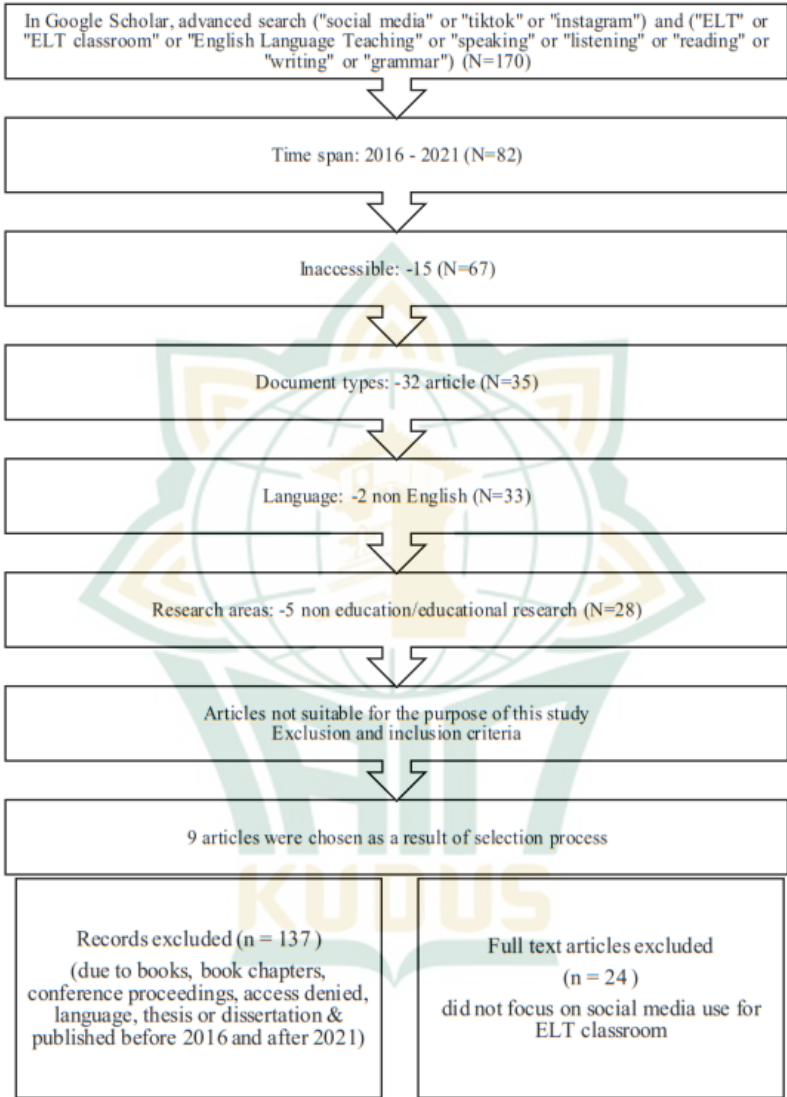


Figure 3.3. Searching procedure following PRISMA.

Phase 5 : Interpreting the findings

In the final phases of this study, the focus shifted towards interpreting the findings derived from the nine selected articles, which met the criteria for investigating the use of social media in English



language teaching and learning. These articles were categorized into three distinct research method groups: six qualitative studies, two quantitative studies, and one study that employed a mixed-method approach. Each article was carefully examined and analyzed in accordance with its respective research questions.

Each of these articles was subjected to thorough analysis, considering their respective research questions and objectives. Figure 3.4. provides an overview of the methodological analysis employed for the articles. In the case of qualitative research, the studies primarily targeted secondary schools, universities, or educational institutions. The respondents in this group mainly consisted of young secondary school students and adult learners, including undergraduates, postgraduates, and in-service teachers. Although a smaller number of studies were conducted at the primary school level, they represented a minority within the selected articles.

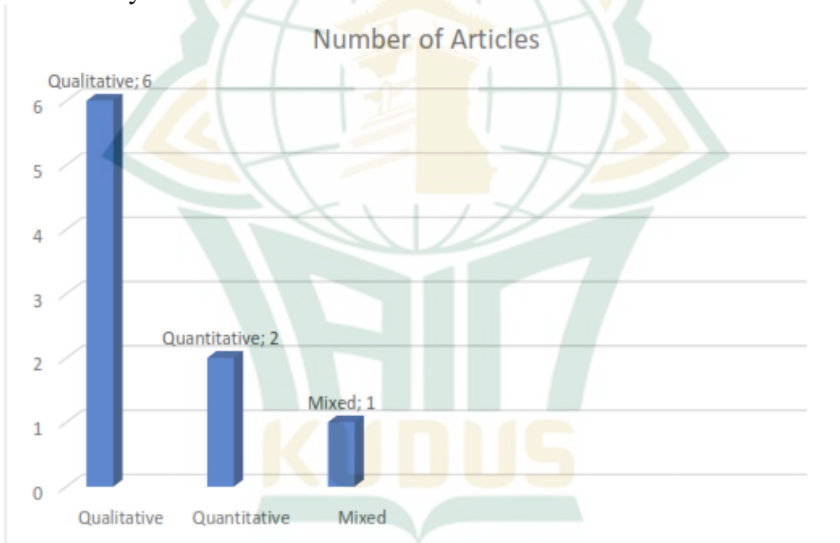


Figure 3.4. Research methods used in the reviewed journals.

**B. Research Subjects**

According to Nasution, qualitative research methods differ from quantitative methods in terms of sampling and population size. Qualitative research typically employs a small sample size, selected based on the specific research objectives. It often involves case studies or multiple cases to provide in-depth insights. Unlike quantitative research, qualitative research does not refer to a population. Instead,

Spradley suggests using the term "social situation," which encompassed the interplay of three elements: place, actors, and activities. The social situation serves as the research focus to understand what transpires within it.<sup>3</sup>

In this particular study, the subject comprised nine selected journals out of the initial pool of 82 journals gathered from Google Scholar between 2016 and 2021. These nine journals were chosen after passing the screening process.

### C. Instruments and Data Collection Technique

The definition of data source can be explained by understanding that the research subject is the source from which research data is obtained. In a research study, the data source served as the primary foundation for discussions and analysis in a research study.

In naturalistic research, the human researcher typically acts as the primary instrument for data collection. However, as the research progresses, other types of instruments may also be employed. In some cases, an instrument can be developed based on the data generated by the human researcher to enhance the research process.<sup>4</sup>

In this particular study, the researcher utilized specific instruments for data collection and analysis. The first instrument was a software program called "Publish or Perish," which retrieved and analyzed academic citations. This program helped gather relevant data for the research. Additionally, a PRISMA flow diagram was employed to screen and organize the collected data. The data source for this study was derived from Google Scholar, covering the period from 2016 to 2021.

### D. Data Analysis Technique

In this paper, the researcher conducted coding and analysis on the studies under investigation. To analyze the data, the researcher employed a content analysis method widely used for textual analysis. This approach facilitated the comparison, contrast, and categorization of the data, leading to a comprehensive understanding of the findings.

In qualitative research, descriptive development takes place through a phenomenological approach. Phenomenology can be seen as a manner of thinking that allows individuals to comprehend the various

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<sup>3</sup> Prof. Dr. Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D* (Bandung, 2013).

<sup>4</sup> Yvonna S. Lincoln and Egon E. Guba, "Research, Evaluation, and Policy Analysis: Heuristics for Disciplined Inquiry" 5, no. 3 (1986): 20.

aspects of the world they experience. By using this approach, the researcher aimed to provide a comprehensive description that allows readers to understand various aspects of the phenomenon under investigation.

Sugiyono, in his book "Metode Penelitian Kuantitatif, Kualitatif & R&D," defined data analysis as a systematic process of gathering and organizing data obtained from interviews, documentation, and field notes. This process included organizing the data into categories, breaking them down into units, synthesizing the information, identifying patterns, selecting important elements for further study, and drawing conclusions. The ultimate goal is to present the data in a way that is easily understandable for both the readers and the researcher.<sup>5</sup>

Miles and Huberman outlined three essential activities in the process of data analysis: data reduction, data display, and drawing conclusions. Before engaging in analysis, researchers first collect and prepare the data, making necessary preparations for the subsequent data reduction process.<sup>6</sup>

#### 1. Data Collection

The process of data collection involved systematically searching, recording, and gathering objective information obtained through observations and interviews conducted in the field. It encompasses the comprehensive recording of various forms of data.

#### 2. Data Analysis

##### a. Data Reduction

Data reduction entails condensing and summarizing the collected data, focusing on key aspects, identifying themes and patterns, and eliminating irrelevant information. By reducing the data, researchers can obtain a clearer and more concise representation. Thus make it easier for researchers to carry out the following data collection and look for it when necessary.

##### b. Data Display

In qualitative research, data presentation is often accomplished through text and narratives. In this study, the researcher presents the reduced data systematically in the form of a narrative report. This format allows for a coherent and organized presentation of the findings.

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<sup>5</sup> Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*.

<sup>6</sup> Sugiyono.

c. Conclusion

According to Miles and Huberman, as cited by Sugiono, the final step in qualitative data analysis involved drawing conclusions and verifying them. Initial conclusions are tentative and subject to change if subsequent data collection does not provide solid supporting evidence. Conclusions in qualitative research aimed to address the research problem formulated at the outset. However, these conclusions may evolve as the research progresses and new insights are gained during fieldwork.

