

CHAPTER III

RESEARCH METHOD

This research aims to elucidate the perceptions of teachers regarding the use of Chat GPT (Generative Pre-trained Transformer) in the classroom. Chat GPT is an advanced language model that uses artificial intelligence to generate human-like responses. The study intends to examine how teachers perceive the benefits, challenges, and ethical considerations associated with integrating ChatGPT into educational settings. Additionally, the research seeks to identify the factors that influence teachers' acceptance and willingness to adopt this technology as a teaching tool. The findings of this study will provide valuable insights for educational stakeholders, policymakers, and researchers interested in the use of AI-based chatbots in education.

3.1 Research Design:

Qualitative research delves into real-world issues, focusing on understanding rather than numerical data. Unlike quantitative research, which deals with numbers, qualitative research generates hypotheses and explores the "hows" and "whys" through participants' experiences and behaviors. It can stand alone or be part of mixed-methods research. This approach asks open-ended questions, capturing the complexity of human behavior and experiences, which can be challenging to quantify. While qualitative and quantitative research are often seen as opposites, they are not necessarily incompatible and can complement each other. (Moser A, Korstjens I. 2017:23). Qualitative methods excel in offering intricate textual portrayals of individuals' encounters with a research issue, aiming for a deeper comprehension of the problem at hand. Researchers opt for qualitative approaches to gather data, typically through interviews, to achieve a thorough understanding of the subject matter. In this study, interviews serve as the primary method for data collection.

3.2 Research Participants:

The Population of this study was teachers at SMP Islam Duduksampeyan Gresik English teaching allows teachers to delve into broader topics. ChatGPT can assist teachers in exploring diverse subjects in English, such as culture, history, or the

latest trends in the language. This enables students to expand their knowledge beyond the regular curriculum. According to Kanika Garg (2017), In general, sampling techniques can be divided into two types:

Probability sampling ensures that every item in the population has an equal chance of being included in the sample. One method of conducting random sampling is to create a sampling frame and use a random number generation computer program to select the sample from the frame (H Taherdoost, 2016). Probability sampling offers the least biased approach but may be more time-consuming and resource-intensive for a given level of sampling error (Brown, 1947).

Non-Probability Sampling, is commonly associated with case study research designs and qualitative research. In the case of qualitative research, case studies often focus on small samples and aim to examine real-life phenomena rather than making statistical inferences about the broader population (Yin, 2003). Non-probability sampling can be divided into four parts: Quota sampling, Snowball sampling, Convenience sampling, and purposive or judgmental sampling. Furthermore the technique to use for this research is **purposive or judgmental sampling**

- Purposive or Judgmental Sampling

Purposive or judgmental sampling is a strategy where specific settings, individuals, or events are deliberately selected to provide important information that cannot be obtained through other sampling choices (Maxwell, 1996). Researchers include specific cases or participants in the sample because they believe they hold valuable insights: because the target and purpose the participants are clear at SMP islam Duduksampeyan Gresik then I take the most appropriate technique, namely purposive or judgmental sampling.

3.3 Data Collection:

In this study the data were collected by interview and refers to the structured procedure of gathering, documenting, and acquiring information or data from different sources or through specific techniques. During the data collection phase, researchers employ various methods, create instruments, and conduct procedures to

gather the required data. In this particular study, interviews were employed as the data collection method. Subsequently, the collected data was analyzed to achieve an understanding of teachers' perspectives on the usage of ChatGPT in English learning.

3.4 Instrument of the research

According to (Flick, U. (2014), Data collection methods and interview tools are the techniques to used in research to collect various data which are processed quantitatively or qualitatively, then arranged systematically. Data collection is defined as research activities that aim to collect field data needed to answer research questions in qualitative research. Research instruments are tools that use various types of information in research to be collected, processed quantitatively or qualitatively and then arranged systematically. Qualitative researchers as human instruments function to determine research focus, select informants as data sources, collect data, assess data quality, analyze data, interpret data and make conclusions on all stimuli from the environment that must be estimated to be meaningful or not for research. Quantitative research uses test instruments, non-test instruments and test inventories. For disclosure of facts to become data, the instruments used must be of good quality in the sense of being valid and reliable so that the data obtained will be in accordance with the facts or circumstances when collecting, studying, studying the problem under study

3.5 Data Analysis:

According to Graue, C. (2015). The qualitative analysis of the data was described as follows:

- **Compilation of Questionnaire/Interview Responses:**

I made questions for the interview according to the conditions and problems in my research which question I have made are attached to page 36.

- **Transcription of Collected Data Results:**

Next, after I got answers from the teachers regarding the questions I have provided, summarize and collect data according to the answers given by teacher after the interview process.

- Integration of Responses from Both Instruments:

To ensure accurate results, the responses from both the questionnaires and interviews were linked together. This integration allowed for a comprehensive analysis by considering different perspectives and capturing a more complete picture of the data.

- Drawing Conclusions from Analyzed Data Results:

Finally, conclusions were drawn based on the available data results that had been analyzed. This involved interpreting the findings, identifying that the result of study is negative perception which is more visible from the views of teachers in SMP islam Duduksampeyan Gresik.

Conclusion:

This research method outlines a comprehensive approach to explore teacher perceptions of using ChatGPT in the classroom. By examining the perceived benefits, challenges, ethical considerations, and factors influencing acceptance, this study aims to contribute to the growing body of knowledge on AI-based chatbots in education. The findings will help inform educational practices and policies related

