NON-ENGLISH DEPARTMENT STUDENTS' PERCEPTIONS OF THE

USE OF MACHINE TRANSLATION IN LEARNING ENGLISH

SKRIPSI

By

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FACULTY OF EDUCATION AND HUMANITIES

UNIVERSITAS KRISTEN DUTA WACANA

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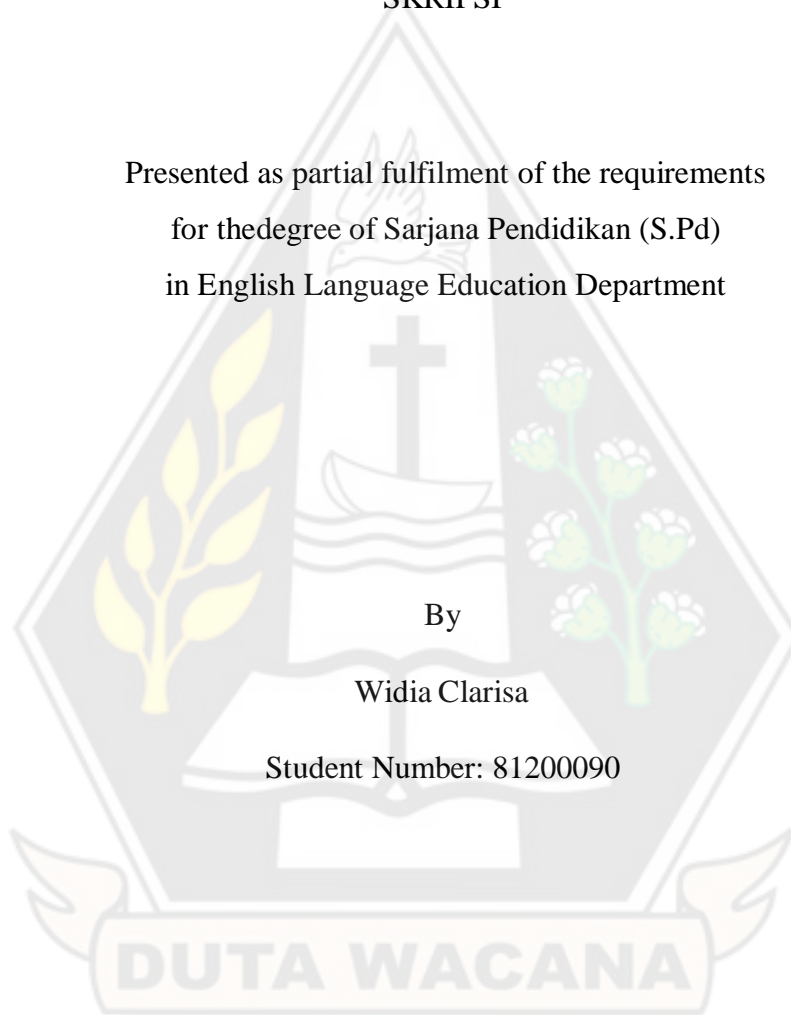SKRIPSI

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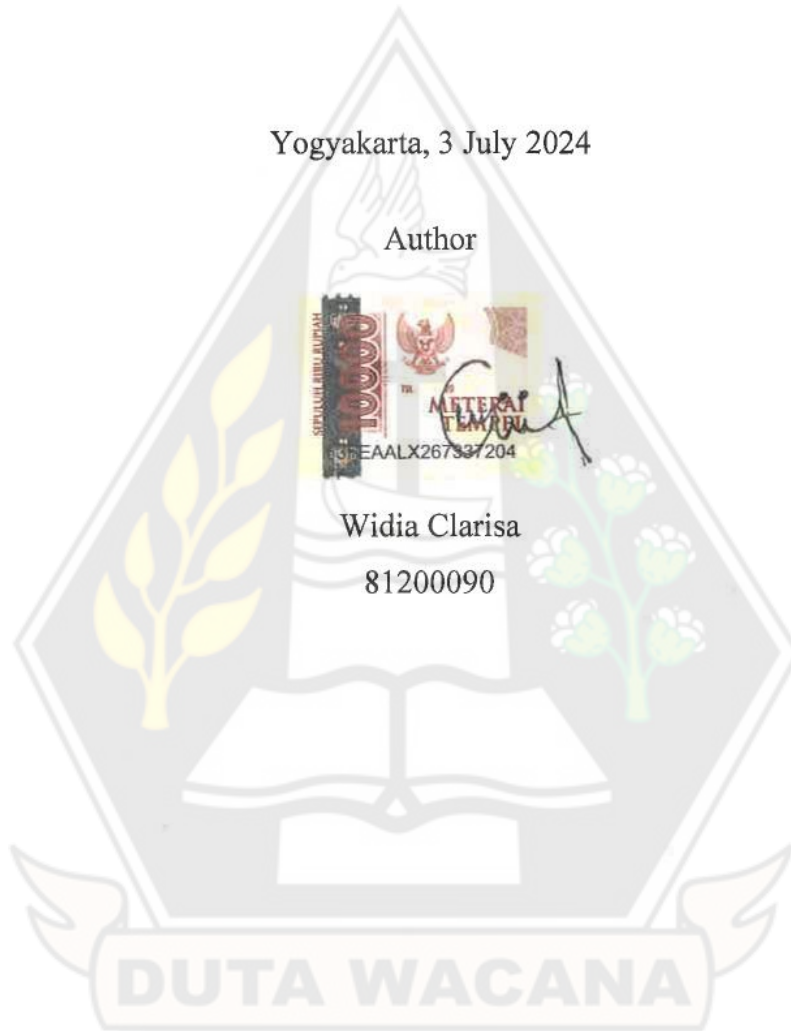
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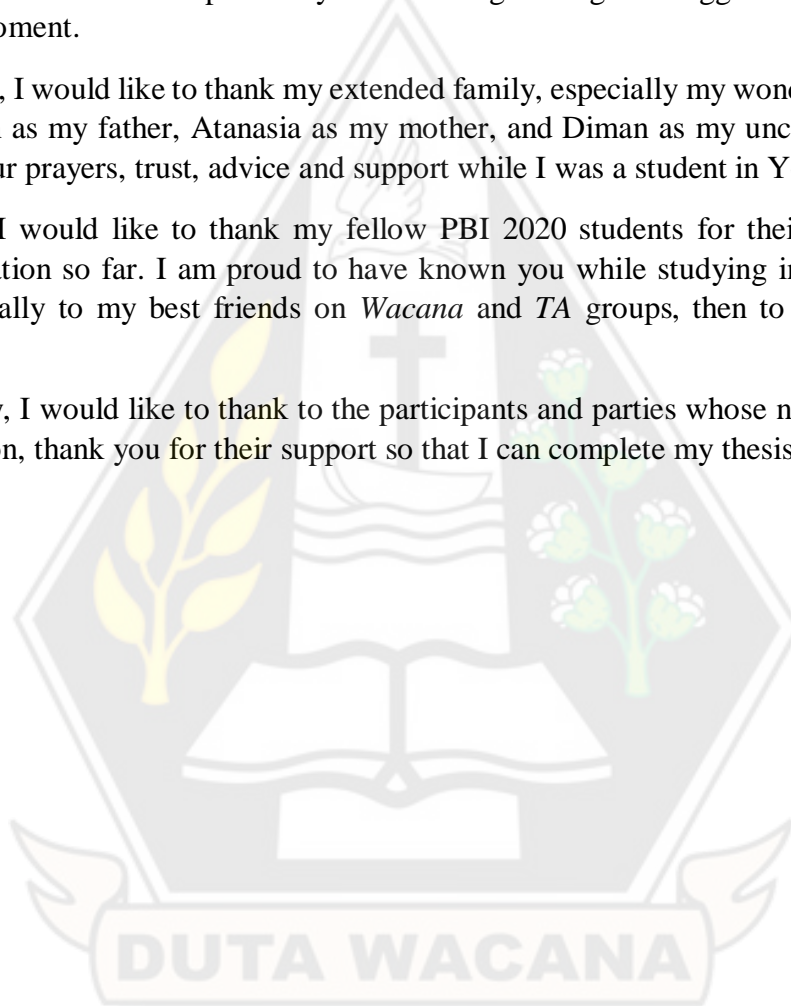
TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

Clarisa, W. (2024) *Non-English Department Students' Perceptions of the Use of Machine Translation in Learning English* (Unpublished Undergraduate Thesis). Universitas Kristen Duta Wacana, Yogyakarta, Indonesia.

This research aims to investigate the extent to which non-English department students perceive the used of Machine Translation for learning English. Therefore, the researcher's aim in conducting this research was to explore more deeply the perceptions of non-English department students regarding the use of Machine Translation as a supporting medium for learning English. This research used mixed methods, such as distributing online surveys (questionnaires) via social media and interviews. In an online survey, this research involved 80 non-English department students throughout Indonesia who used MT. Findings from the online survey showed that students showed positive attitudes towards the use of machine translation for English language learning. Apart from that, this research used follow-up interviews to gather more in-depth information, interviews involved 6 students who were willing to be interviewed. Participants were selected through a survey involved 5 female and 1 male, the interviews were conducted online and offline. From the results of interview data analysis, the researcher found that learners rely on MT to translate texts, learn new vocabulary, found the meaning of words and phrases, and learn how to spell/pronounce unfamiliar words; Machine Translation is effective to improving understanding and practicing students' English skills; the MT easy to use, instant, and flexible so students can use it anytime and anywhere. The research results suggest that educators and students used MT wisely to achieve English learning targets. Apart from that, this research also suggests that further research can dig deeper into information regarding the shortcomings of using MT from this research so that educators and students can anticipate it.

Keywords: Machine translation, the use of machine translation, student perceptions.

INTISARI

Clarisa, W. (2024) *Presepsi Siswa Jurusan Non-Inggris Terhadap Penggunaan Mesin Translasi untuk Belajar Bahasa Inggris (Tesis Sarjana Tidak Diterbitkan).* Universitas Kristen Duta Wacana, Yogyakarta, Indonesia.

Penelitian ini bertujuan untuk menyelediki sejauh mana presepsi siswa jurusan non-Inggris terhadap penggunaan Mesin Translasi untuk belajar Bahasa Inggris. Adapun, tujuan peneliti melakukan penelitian ini adalah untuk menggali lebih dalam presepsi siswa jurusan non-Inggris terhadap penggunaan Mesin Translasi sebagai media pendukung belajar Bahasa Inggris. Penelitian ini menggunakan metode mixed (campuran), dengan menyebarkan survey online (questionnaire) melalui media social dan wawancara. Pada survey online, penelitian ini melibatkan 80 mahasiswa jurusan non-Inggris di seluruh Indonesia yang menggunakan Mesin Translasi. Temuan dari survey online, siswa menunjukan sikap positive terhadap penggunaan Mesin Translasi untuk pembelajaran Bahasa Inggris. Selain itu, penelitian ini menggunakan wawancara lanjutan untuk menggali informasi lebih mendalam, wawancara melibatkan 6 mahasiswa yang bersedia untuk diwawancarai. Peserta dipilih dari survey yang melibatkan 5 perempuan dan 1 laki-laki, kemudian wawancara dilakukan secara online dan offline. Dari hasil analisis data wawancara, peneliti menemukan: Pembelajar menggandalkan Mesin translasi untuk menerjemahkan teks, mempelajari kosa kata baru, mencari makna kata, prasa, dan cara pengejaan/pengucapan kata yang tidak familiar; Mesin Translasi efektif untuk meningkatkan pemahaman dan melatih kemampuan Bahasa Inggris siswa; Mesin Translasi mudah digunakan, instan, dan flexible sehiingga siswa dapat menggunakannya kapan dan dimana saja. Hasil penelitian, menyarankan para pendidik dan siswa menggunakan Mesin Translasi dengan bijak, agar mencapai target pembelajaran Bahasa Inggris. Selain itu, penelitian ini juga menyarankan agar penelitian selanjutnya dapat menggali lebih dalam informasi terkait kekurangan pada penggunaan Mesin Translasi dari penelitian ini, sehingga para pendidik dan siswa dapat mengantisipasinya.

Kata Kunci*: Mesin translasi, penggunaan mesin translasi, presepsi mahasiswa.*

CHAPTER I
INTRODUCTION

This chapter will introduce the topic of this study. This chapter consists of four parts. They are research background, research questions, research objectives, and research benefits.

A. Research Background

Currently, the use of technology were proof of progress in all aspects of life, including aspects of education. The use of technology has an impact according to their needs, considering that the use of technology is very popular in various circles of society. One of them is when the COVID-19 pandemic spread throughout the world, almost all countries applied technology to learning, especially in learning English. Kieu et al., (2021) mentioned that, when our software is connected to the internet, then at that time we can easily and quickly access and collect data or information. Along with the times and modern technology, new ideas are created which have an impact on new innovations in the world of education, especially teaching and learning English (Hoi & Dong, 2020 in Kieu et al., 2021). Then for students, access to online media can help them find learning materials and hardware from official and trusted sites.

Then, one of the software for students to learn L2 is MT. MT can be defined as the translation of text from one language into another by a system or technology without human involvement. Almost in its entirety MT technology supports fast and practical translation of sentences, paragraphs, document files, and almost the entire website. The scope of MT is not limited to the translation of texts, but it can also be used in speech translation. Furthermore, in the global market, MT is estimated to be available in more than 1000 types of online translators and offline translation applications and some of them can be used for

free (Liu et al., 2022). Yang and Mustafa (2022) stated that MT is the automatic configuration of a word or sentence from one natural language to another. There are several types of MT in each year, such as rule-based machine translation (RBMT), corpus-based, statistical machine translation (SMT), and the latest neural machine translation. So far, most people use machine translation as an auxiliary tool for translators, this machine translation is flexible which means that people can use it anywhere, be it in public places, in schools, in communities, even in business environments (Marito & Ashari, 2017). Fitria (2021) mentioned that as we know, the use of machine translation involves translating text, language or pronunciation from one language to another. The existence of MT has several advantages including: practical when used, instant results, time-saving, and relatively low cost, compared to the services of human translators, they are not available at all times, require time and expensive costs to produce a translation. Therefore, it is not surprising that today the role of MT needed by most people because it is popular, easily accessible, and available online and offline.

Clifford et al., (2015) stated that MT, and especially free online programs such as Google Translate, influence students' perspectives and engagement with a second language. Moreover, Habeeb (2020) stated that scholars in the last century have focused more on MT due to the ongoing technological revolution. This MT product or tool is approved for it is high performance as a translation medium. Moreover, this is related to the importance of the relationship between communication and translation, apart from language students there are students from other faculties and concentrations who also often used MTs, especially Google Translate (GT), they use GT to translate a number of texts, from a foreign language to their mother tongue. Even though, this Google product has many benefits, in fact GT still has some drawbacks. Baker (2013) in Murtisari et al., (2019) stated that students have good experiences regarding the use of MT, the reason is because they think that MT is faster, more effective for learning new vocabulary and can detect what words which should be used based on the sentence typed. However, some students also felt that the use of MT was less accurate due to ownership of the translation results. Moreover, they believe that long essays will result in poor translation quality if

using GT so it will have an impact on plagiarism. Furthermore, the use of GT must first obtain permission from the teacher.

MT is less precise for detecting verbal or tangible language speech. Another weakness is that MT has shortcomings in natural language processing (Mahardika, 2017). Heo et al., (2019) stated that serious problems remain in neural-based MT (NMT) systems, such as over-translation and under-translation. Over-translation occurs due to duplication or duplicated words in the translation of the main sentence, while under-translation occurs when there is a lack of words in the source translation, resulting in an incorrect translation of a sentence. MT translation error analysis shows that under-translation is higher than over-translation. In addition, the problems that occur in translation without human touch are lack of accuracy, acceptance, and word detection in the target text. These MT-related problems are caused by the concept of MT, which is a word-for-word translation (Sipayung, 2021). Then, along with the times, it has had an impact on the advancement of online translation technology, which is getting better, so that negative opinions begin to shift. However, there are some positive articles that appear discussing aspects of online translators based on grade level and student work level (O'Neill, 2019). Next, Santoso (2010) in Chandra and Yuyun (2018) further added, the quality of the translation results will be determined by the length and shortness of a text or paragraph, generally the shorter of text, the better quality of the translation.

There have been many studies in the world that have examined the use of MT for English language learners, many previous studies were conducted in Europe (Olkhovska and Frolova, 2020; Opon and Gałuskina, 2017), Asia (Awadh and Shafiull, 2020; Yamada, 2019), and Indonesia (Farhana et al., 2023). Olkhovska and Frolova (2020) research explored the impact of using MT engines performance of translation students. The subjects included 48 undergraduate students of the School of Foreign Languages of the National University V.N. Karazin Kharkov. This research states that there are differences in the quality of texts translated by students who did not receive prior training after editing with the help of MT showed poorer quality compared to students' translation results without using MT of the

same translated text. These findings show the importance of teaching students about the application of machine translation in the academic world by developing cross-interest methodologies according to the learning curriculum. These findings are similar to previous studies by Opon and Gałuskina, (2017) they investigated whether MT should be introduced into formal translation training, participants in this study involved students of English and French at Silesian universities. Then the methodology used in this research is quantitative. The results of this study suggest post-editing of raw machine translation results. Therefore, translation students need a series of training sessions on the use of MT technology in translation classes. This aims to enable students to think more critically and perceptively. Then, study by Yamada (2019) researched the impact of Google neural MT on student translators in the Japanese context, researchers involved 71 students majoring in English and used an experimental design to investigate higher education student post-editing potential. This research shows that the neural capabilities of machine translation demonstrate a more modern and human-like translation quality making it a reference for translation students to meet professional standards post-editing quality. However, study by Awadh and Shafiull (2020) aims to investigate the challenges Yaman translation students face when translating neologisms from English to Arabic. Participants in that study were 73 students at Sana'a University, Yemen, quantitative methods were used in this research. Then, this research states that most students have difficulty translating and understanding English neologisms or to find Arabic equivalents for English neologisms. Meanwhile, the translation machine also produces quality bad translation results in the resulting translation being inaccurate. The study by Farhana et al., (2023) explored students' levels of pre-editing translating academic texts to Google neural machine translate. The subjects in that research were 20 students English Language Education Study Program, at Mataram University, Indonesia. Then, the method in this research used qualitative, and the results of this research found that the majority of students produced better text quality when pre-editing using the help of Google Neural Machine Translate. In short, research on machine translation has been widely carried out in other countries, but only a few have been conducted in Indonesia and

only a few have focused on perceptions of the use of machine translation in the Indonesian context. Therefore, this research were investigated perceptions of the used MT for learning English in the Indonesian context.

Previous research on machine translation use has mostly involved university students. Cetiner and Isisag (2017) involved 31 students at the English translation and interpretation department at a Turkish university. Ilma (2021) involved 30 English language program students in the Indonesian context. Karjo and Metta (2019) involved 20 theses of English students at Binus University, Indonesia. Nguyen and Ngo (2021) involved 210 English language education students at Van Lang University, Vietnam. Pokriveakova (2022) involves English students from 4 countries (Slovakia, the Czech Republic, Poland, and Hungary) in Slovakia. In conclusion, so far there has not been much research on machine translation in English learning which involved non-English department students as research subjects, so this research focused on non-English department students as research subjects.

Many previous studies have used mixed methods to explore non-English department students' perceptions regarding the use of machine translation in learning English. By using mixed methods, identification of trends or patterns can be investigated using quantitative data. Additionally, the in-depth opinions and experiences of the participants can be uncovered by using qualitative data. Several previous studies used mixed methods, including: (Gumartifa et al., 2022; 2021; Lee, 2022; Liu et al., 2022; Omar, 2021; and Shahriar, 2023). In conclusion, mixed methods research is most suitable and widely used to explore research on non-English department students' perceptions of the use of machine translation for English language learning.

B. Research Questions

The researcher uses the following questions to find answers the study.

1. To what extent did non-English department students use MT in learning English?

2. How did non-English department students perceive the use of MT in learning English?

C. Research Objectives

This research examines the relationship between how students use Machine Translations, students' perspectives, and the benefits of using MT to learn English. This research intends to:

1. To find out how students used MT to learn English.

2. To find the students' perspectives when they used the MT.

D. Research Benefits

This study is expected to be beneficial for some parties. First, hopefully it will be useful for educators to increase their insight regarding the use of MT as a medium to support the English learning and teaching process. Second, for in-service and pre-service teachers, hopefully this research can increase their knowledge about the use of MT, so that they can produce varied and innovative teaching strategies when teaching and becoming English teachers. Third, students, especially non-English department students, can use MT as an application to improve their English skills. Students can take advantage of the advantages offered by MT so that their English learning process is more effective. Fourth, policymakers, it is hoped that the results of this research can be used as a reference in determining policies regarding the use of MT. Lastly, for researchers, it is hoped that this research can also become a reference for researchers who research the same topic, so that they can dig deeper and correct the shortcomings of this research.

CHAPTER V
CONCLUSION

This chapter consists of three parts summary, implication, limitations and future studies.

A. Summary

This research was conducted to answer two research questions. The first question concerns the extent to which non-English department students use MT in English language learning. Interviews are the method used to answer the first question, 6 interviewees in this research. This research found that students use MT when translating texts, studying and checking vocabulary, synonyms, phrases and spellings of unfamiliar words. In addition, students also use MT during writing, listening, speaking and reading activities. The use of MT has proven to be effective in helping students' learning process and also improving students' English language skills. Regarding the second question, to find out non-English students' perceptions of the use of MT in English language learning. After conducting an online survey (distributing the questionnaire), the results showed that students had a very positive attitude towards using MT as an English learning tool. The survey results show an average value of 3.25, which means their perception of MT use is highly positive. Students stated that familiarity with MT, MT enhance language learning skill, and positive effects of MT on English. Even though the MT translation results are still less accurate, these weaknesses can still be overcome so that they become a challenge for students when learning English.

B. Implications and Contributions

The implications of this research can be seen from its findings. Through the results of an online survey, it was found that students showed a very positive attitude towards using MT as an English language learning medium. In addition, the interview results show that MT has proven to be effective in improving students'

understanding in language learning as long as it is used correctly. Students can use MT to help them in English classes; for example, in English classes, there is material that is difficult to understand in terms of meaning and pronunciation; students can take advantage of several advantages provided by MT. As educators, English teachers can use MT as a medium for learning English in the classroom; for example, teachers can provide material related to word translation, sentence structure, and word spelling. Apart from the classroom, students can also take advantage of the advantages MT offers, so they can learn languages independently, anywhere, and at any time. These findings can be used as an alternative for teachers to use MT as a supporting medium when translating, arranging, and spelling words in class. However, teachers or students must address the use of MT wisely so that learning targets can be achieved. Apart from that, this research also contributes to other research. In terms of participants, 80 participants were interviewed regarding the use of MT in Indonesia. Apart from that, the number and area are wider than previous research; for example, previous research only examined a class, university, or region in Indonesia. This research uses mixed methods, resulting in broad coverage because the data was obtained from surveys and interviews compared to previous research which only relied on one research method. The quantitative data results can be used as consideration for non-English students regarding the variations and use of MT.

C. Limitations

The researcher realizes that there are limitations to this research, even though there are implications and contributions. This research only used non-English major students so they were not required to study English, in contrast to English major students who were required to study English. Second, an imbalance was found between the number of participants and the number of regions. Therefore, the researcher states that this research does not cover the context in Indonesia. Third, time limitations caused a small number of participants to be involved in the research. Finally, the researcher realized that the interview participants had limitations in communicating, so not enough information was conveyed.

D. Future Studies

Despite its results and limitations, this study can recommend several suggestions for future research. First, in future research, research can address the same topic but must use different instruments or data collection techniques, such as using tests or classroom observations so that the coverage of the data obtained is wider. Second, in future research, researchers can conduct research using the same methods and topics but are more specific to the context, such as participants, departments, levels or research areas to see whether the results are the same or different from previous research.
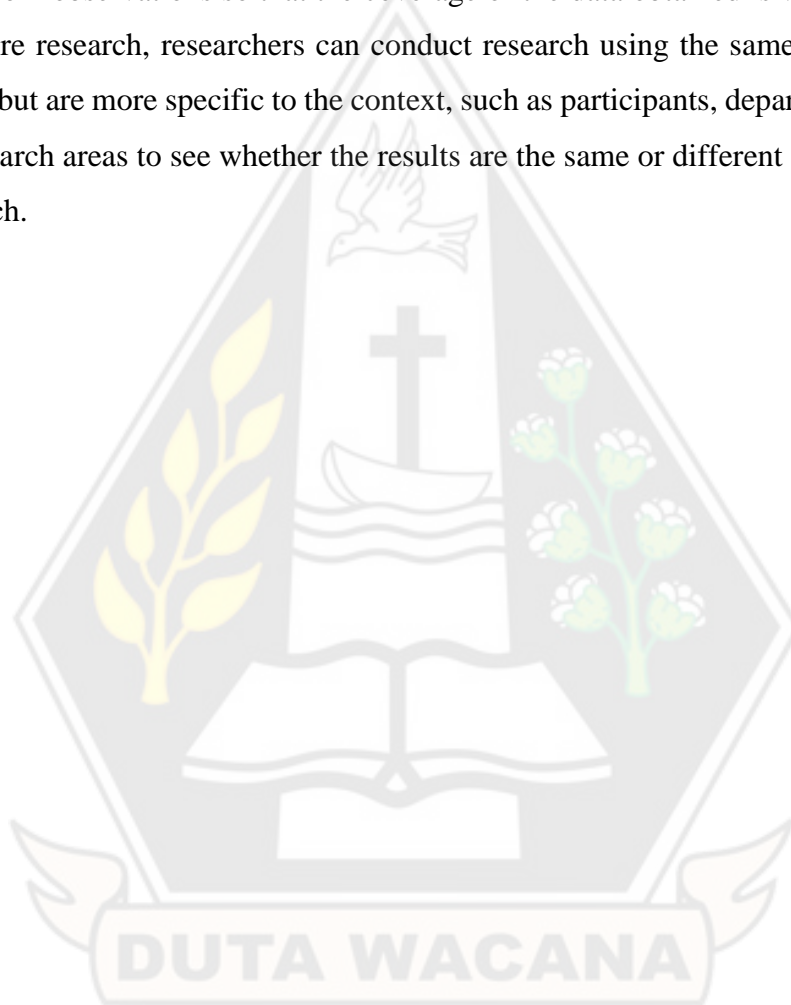
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