STUDENTS' PERCEPTION OF USING DEEPL AS MACHINE TRANSLATION IN ENGLISH LEARNING

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Abstract: Technological advances influence the development of educational support with various facilities offered to students such as DeepL as a translation machine that can be used as an alternative by students to understand English texts. This study aims to describe students' perceptions of the use of DeepL in English learning in Jabodetabek. The population of this study is 210 students who have had the experience of learning English by utilizing DeepL. This study is descriptive quantitative research using a questionnaire. In collecting data, this study used a 5-point Likert scale questionnaire to determine students' perceptions of the use of DeepL for learning English. The results of this study show that the mean of this study was over 3.5 reflecting good and very good perception. A total of 57.35% of students strongly agreed and 39.71% of students agreed that DeepL helps in understanding English texts, although the use of DeepL has impacts or drawbacks. DeepL helps students improve their vocabulary, and understanding of English and saves time in doing assignments, and students think that using DeepL to translate things or do assignments is ethical.

Keywords: DeepL, Machine Translation, English, Indonesian EFL Students

INTRODUCTION

Nowadays, technology is becoming more complex over time and the advancement of technology is extremely beneficial. The use of electronic technology in education has resulted in considerable advancements, which have benefited the learning and teaching processes. Technology advancements are making it easier to obtain legitimate information needed for independent study, such as the internet, electronic or online dictionaries, tools for correcting pronunciation, translation software, mobile applications for language learning, etc (Nduwimana & Ndoricimpa, 2023). The increase in technology has significantly impacted the field of education, leading to the emergence of various applications and websites that can be easily accessed to support learning. This includes online learning platforms, skill enhancement websites, digital classroom applications, and machine translation (MT) tools.

Machine translation (MT) is required for several important reasons that represent today's global and technological difficulties and needs. Machine translation, when compared to manual translation, can save time and money, allowing organizations and individuals to obtain translations rapidly and efficiently. You can use machine translation to help in language learning (Manegre et al., 2023). Nevertheless, the data regarding the implementation of these technologies in translation is not quite deterministic in practice (Kirov & Malamin, 2022). Machine translation users do not always trust machine translation tools' translation results, although they provide an immediate and simple way to access content and converse with others in other languages (Liu et al., 2022). Machine translation can produce results quickly. However, users should not fully trust these translations, as no evidence has definitively proven that machine translation consistently achieves high accuracy.

DeepL is a widely used machine translation tool among foreign language learners. Launched in 2017, it supports 31 languages, including Indonesian. Reputable for producing translations of excellent quality is the machine translation technology DeepL (Almusharraf & Bailey, 2023) DeepL is far less capable of errors than Google Translate (Esperanca-Rodier & Frankowki, 2022). This machine translation is regarded as having the highest level of accuracy compared to other machine translation tools. DeepL, as an improved and more recent version of machine translation, represents a sophisticated artificial intelligence (AI) system (Meilleur, 2022). According to Rahimi, accuracy refers to an appropriate and thorough description of the source text and its proper transfer into the target text (Yulianto & Supriatnaningsih, 2021). This machine is used to obtain immediate results from the translation process compared to many other translation programs, DeepL Translator has been able to set itself apart by offering more accurate and natural translations. (Fitria, 2023). Based on the results of research conducted by Ahmad Yulianto and Rina Supriatnaningsih on the level of accuracy of pair language translation results, it was found that the accuracy of translation using DeepL was accurate. DeepL's output holds a 99.04% correct value (Yulianto & Supriatnaningsih, 2021). The DeepL translator tool appears to be the most efficient and trustworthy machine translation tool at the moment (Polakova & Klimova, 2023).

Following several experts, translation has various interpretations yet has the same meaning. Translation, as defined by Nida and Taber (2003), is the replication of the meaning and style of the original language as closely as possible to its natural equivalent in a target language (Yulianto & Supriatnaningsih, 2021). A message can be conveyed from one language to another through translation, preserving its meaning and linguistic structure (Bunga & Katemba, 2024). On the other hand, as stated by Suryawinata, translation is the action of re-expressing the meaning of a source language text in the target language text with the correct equivalent. Purwaningsih defines a good translation as one that is accurate, agreeable, and readable (Sagita et al., 2021). According to Laksana and Komara (2024), DeepL enables rapid and simple searches for challenging or unfamiliar terms, making it a more convenient option than a traditional dictionary. Machine translation is essential for quickly and efficiently converting text or speech from one language to another. Machine translation gives a basic, even high, level of translation and proposes an effective tool to be used in both prose and literature. (Omar et al., 2020). Machine translation (MT) is also referred to as a subfield of natural language processing and computational linguistics that explores the ability of software to transform text and audio from one language that is natural to another (Kharkiv, 2020). Machine translation is a common tool for multilingual entities. It allows all members to communicate (write) and listen (read) in nearly any language (Patašien, 2021).

Ramli et al believe that numerous internal and external influences can impact a student's perception. Students' needs and desires, characteristics, and experiences are examples of internal influences. Peer interactions, the teacher, the learning environment, and the support of relatives and friends comprise the external components (Susilawati & Rezeki, 2024). This includes everything that is felt and captured by the five human senses, so that different people can perceive the same stimulus differently, influencing how we see and respond to the world around us. Perception is a process that is preceded by sensing (Setiawan, 2020). Adolph and Kretch (2013) believed that perception is typically influenced by surroundings and time as perceptual learning (Witayanont, 2024). Perceptions can be created and made when humans have experienced or passed through something so that they have clear knowledge about it, with different treatments and stimuli captured by humans can produce different perceptions according to their understanding and beliefs. Tirado, et al argue that students' opinions should be valued because they agree that students deserve the right to voice their viewpoints about their concerns about the quality of

educational services they receive (Gómez, 2019). Based on this perspective, it is stated that students have the right to have their voices heard and respected concerning the quality of services and facilities that support their education.

Second-language learners can easily access online translation resources, which they can use for various personal and academic needs (Young, 2023). With the existence of machine translation, students are more likely to use it in learning English, the translation assistance provided by machine translation is an ethical thing. There is a widespread opinion that technology is ethically neutral and that bias can only exist when we utilize it (Moorkens, 2022). Clifford et al., (2013), Correa (2011), Groves and Mundt (2015), Jolley and Maimone (2015), and Knowles (2016) stated that the use of machine translation for students learning a foreign language is common and relatively ethical (Ata & Debreli, 2021). The use of machine translation is considered ethical in English language learning. Machine translators are not only used by students but are used by various groups. Everybody, from students to professionals, may utilize machine translation to assist them in translating short and long text, spoken or written into another language (Ismailia, 2023).

The related studies on the student's perception of the use of DeepL in Translation have been conducted by Sidiq and Syafryadin (2024) in the University of Bengkulu's Physical Education Department. Laksana and Komara (2024) conducted Indonesian EFL Students' Perceptions of DeepL Machine Translation Tool: Utilization, Advantages, and Disadvantages. Another related study from Polakova and Klimova (2023) was focused on using DeepL for students writing. Almusharraf & Bailey (2023), Ata and Debreli (2021), and Liu et al., (2022) were focused on the student's perception of using machine translation for English Learning, while Agutin and Siswana (2022), Sagita et al., (2021), and Tsai (2020) were focused on the students' perception of Google Translation. The different studies from Budiartha et al., (2020), Bunga and Katemba (2024), Esperanca-Rodier and Frankowki (2022), Fitria (2023), Yulianto and Supriatnaningsih (2021) were focused on comparing DeepL and the other machine translation performance.

Based on the results of the mini-research that the researcher conducted, there are results, 85.7% often used machine translation in their English learning. In the second question, 66.7% of the total number of participants often used machine translation to understand reading content, 28.6% seldom, and 4.8% rarely used machine translation to understand a text. In the third question, 85.7% of the pre-research participants claimed that they often used machine translation to double-check the written results. In the fourth question, 38.1% of participants strongly agreed that machine translation improves grammar accuracy, 38.1% agreed, and 23.6% disagreed less with the statements. In the last question, 81% of students consider that DeepL is a machine translation that has good translation accuracy, 4.8% choose Google translation, and 14.3% choose others. With a large number of users of machine translation for daily academic needs, the researcher seeks students' perceptions of it, including the quality of translations outputs by DeepL, advantages, and disadvantages, and the ethicality of using machine translation in learning English. This research will benefit a variety of parties, including students, educators, and professionals who often work with foreign languages. For students, DeepL can help them understand texts in unfamiliar languages, thus improving their language skills and vocabulary. It also provides insights into the effective and ethical use of translation tools.

Therefore, this study was carried out to find out more about students' perceptions of the use of machine translation in English language learning in Jabodetabek tends to use machine translation to convert the source language into the target language. In this study, the respondents are using DeepL to translate English into Bahasa Indonesia or Bahasa Indonesia into English.

METHOD
This study set out to investigate how students' perceptions using DeepL as machine translation. The source of this study is primary data. In this study, the researcher employed a questionnaire with close-ended questions as part of a quantitative research design. The data analysis technique used is a quantitative descriptive analysis by looking at the interpretation of students' selected choices fit into the % category of tendency. The descriptive design was used to examine and describe university students' perceptions of using DeepL as a machine translation. The population in this study is 210 students who utilize DeepL to learn English and live in Jabodetabek. The researcher selected English language learners residing in Jabodetabek as respondents for this study due to the area's status as an educational center with extensive access to various learning resources. Students in this region are frequently exposed to technology, including translation tools such as DeepL, making them relevant subjects for studying the use of machine translation. Additionally, the diversity of academic programs offers a range of English language learning experiences, enabling the collection of deeper insights into their perceptions and habits regarding these technologies. By selecting this group of respondents, this study aims to obtain representative and valuable data to understand the impact of using DeepL in the English language learning process in Indonesia.
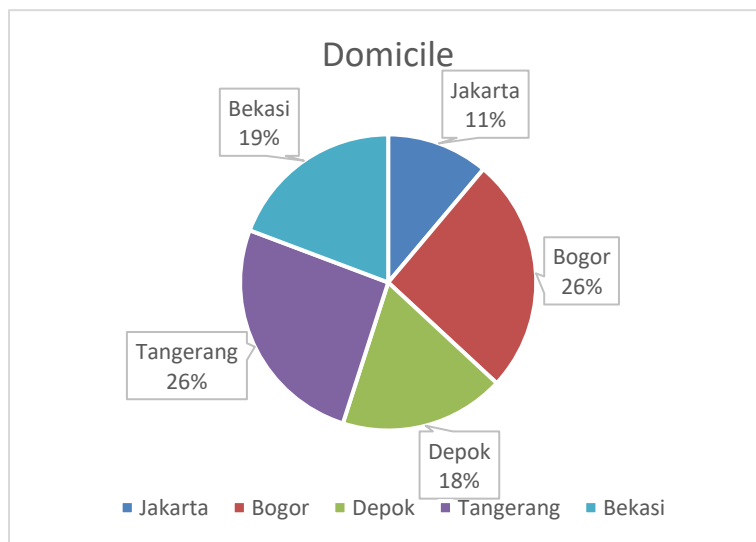
Figure 1: Population's Domicile
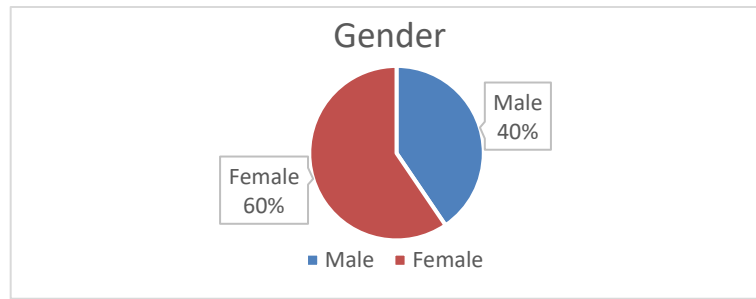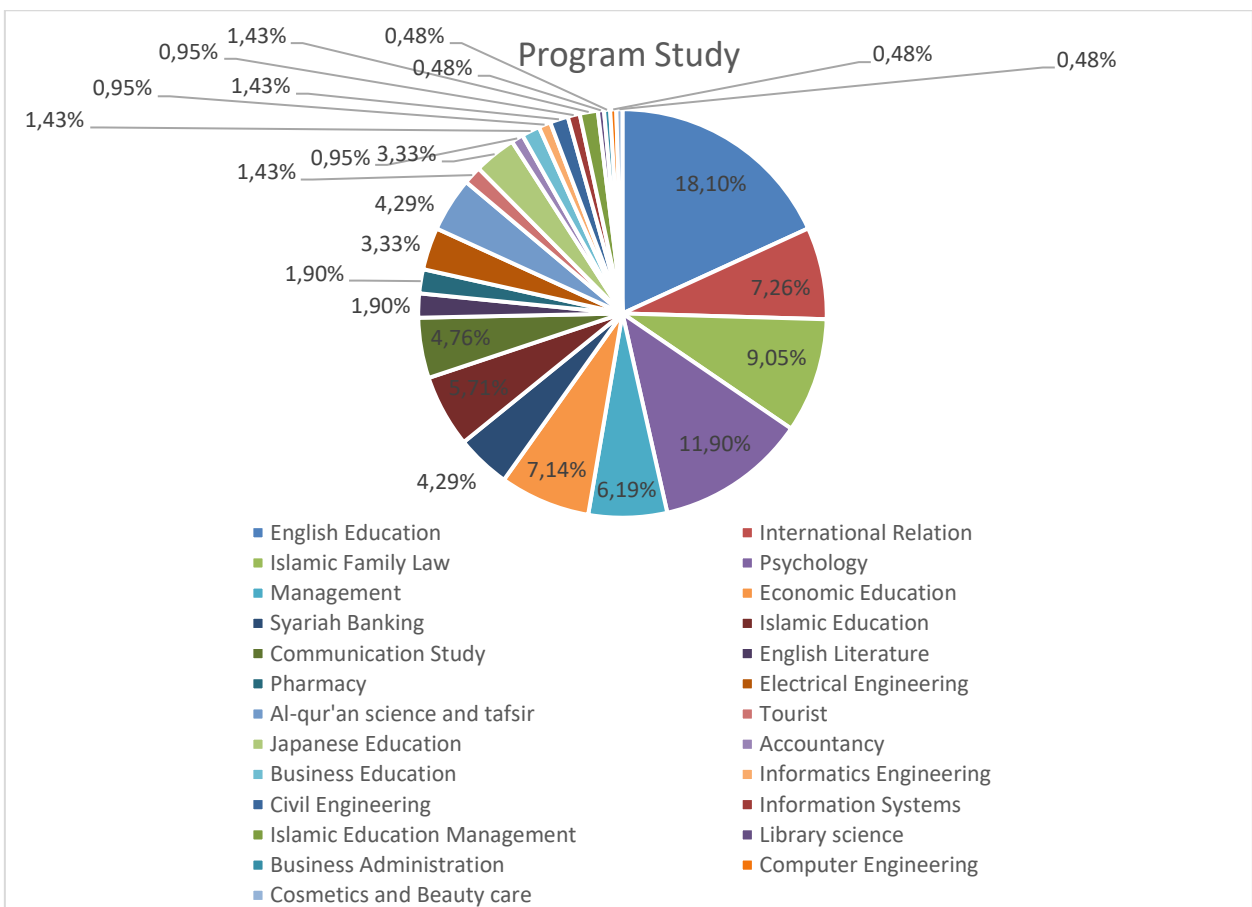
Figure 2: Population's Gender

Figure 3: Population's Program Study

The sampling technique in this study used simple sampling random, each person in the population has an equal chance of being selected. Arikunto argues that in sampling, researchers should treat all subjects in the population as equal by mixing them appropriately (Imam Machali, 2021). In determining the sample, researchers used the Taro Yamane formula with a confidence level of 10%. The formula for determining the sample, as stated by Adam (2020) As follows:

$$n = \frac{N}{1+N.d^2}$$

Where:
n= minimum returned sample size
N = the population size
d = the margin of error

$$n = \frac{210}{1 + 210.\,0{,}1^2}$$
$$n = \frac{210}{1 + 210.\,(0{,}01)}$$
$$n = \frac{210}{1 + 2{,}1}$$
$$n = \frac{210}{3{,}1}$$
$$n = 67{,}74$$

Based on the calculation, the sample in this study amounted to 67.74, rounded up to 68 people. The number of samples as a percentage is 32.38%. The formula for determining the interval category is as follows:

$$I = \frac{the\ higher\ score - the\ lowest\ answer}{the\ number\ of\ alternative\ answer}$$

The following table outlines the interpretation of interval scores that the researchers intended to use for presenting the collected data:

Table 1: The Interval Score

Interval	Interpretation
1.0.-1.8	Very poor
1.9-2.6	Poor
2.7-3.4	Fair
3.5-4,2	Good
4.3-5.0	Very good

FINDINGS AND DISCUSSION
The data in this study were gained from the questionnaire. The focus of this study was to investigate students' perceptions of using DeepL in English learning. Researchers used the close-ended questionnaire by 5-point Likert Scale; SA (Strongly agree), A (Agree), N (Neutral), D (Disagree), and SD (Strongly disagree). In the first section, there were 4 questions.

**Table 2: Translation Quality of Using DeepL in Learning English**
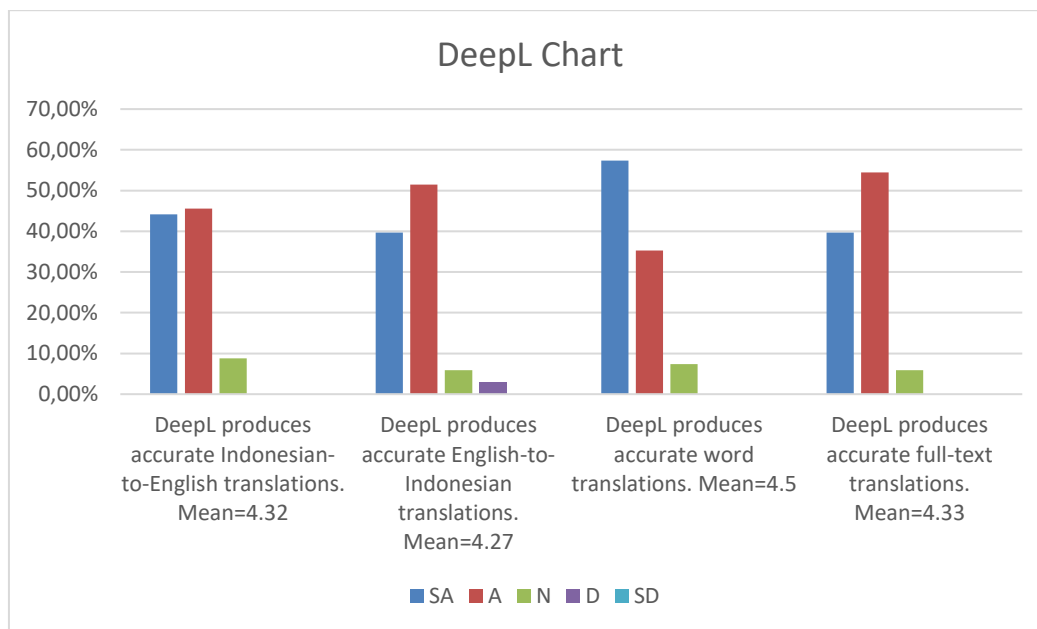
This study discovered in the first section of the investigation that DeepL was regarded as an accurate translation. Based on the survey findings, students generally hold a good and very good of DeepL's ability to translate between Indonesian and English. Regarding the first statement, students think that the translation of DeepL from Indonesian into English is accurate as well as the second statement, most students believe that the translation produced from English into Indonesian is also accurate. According to the results of statement number 3, all students agree that the word-for-word translation produced by DeepL is accurate. Based on the findings, all students agree that DeepL produces accurate full-text translations.

Based on the findings, participants provided perceptions regarding the accuracy of DeepL's translations between Indonesian and English, including both word-for-word and full-text translations. The high percentage of positive student responses indicates a significant level of confidence in DeepL's ability to translate accurately from Indonesian to English. This suggests that, according to the surveyed students, DeepL performs well in both languages. Compared to the Indonesian-to-English translation, fewer students strongly agreed that DeepL accurately translates from English to Indonesian.

A majority agree that DeepL performs well at translating individual words, which is a fundamental aspect of machine translation quality. This suggests that users perceive DeepL as effective at a basic linguistic level. A significant majority believe that DeepL accurately translates full texts, indicating a high level of satisfaction with its performance in handling longer and more complex documents. Overall, the findings suggest that students have a good perception of DeepL's translation accuracy across different types of content (words, full text) and language directions (Indonesian to English, English to Indonesian). Based on the findings of Bunga and Katemba (2024), it shows that DeepL is superior and excellent with a percentage of (45%) for translation results that are easy to understand, accurate, and have no translation errors. Moisieva, Dzykovych, and Shtanko cited in Bunga and Katemba (2024) argue that DeepL generally made fewer mistakes.

**Table 3: The Use of DeepL in Learning English**
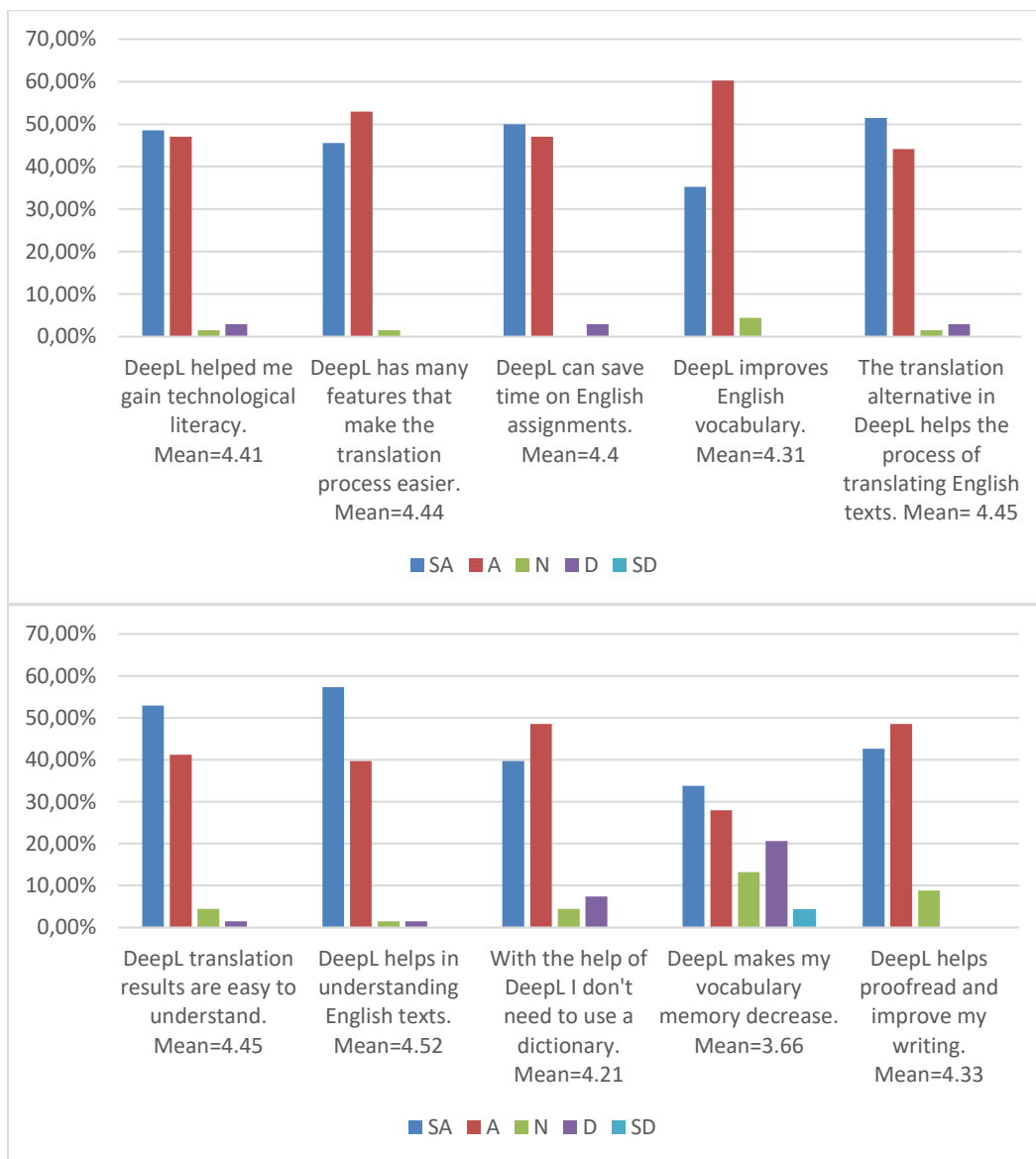
In this second section, the statements showed the results of the student's perception of the advantages and disadvantages of using DeepL, especially regarding its utility in language learning, efficiency in translation tasks, and usability for improving writing skills. DeepL plays a multifaceted role in language learning and technological literacy. Many students found DeepL's features beneficial for simplifying the translation process, highlighting its ease of use. However, opinions regarding DeepL's impact on assignment grades reveal a more divided perspective among respondents. They highlighted a widespread belief that DeepL saves time Regarding its impact on vocabulary, Students generally agreed with the eleventh statement that DeepL helps increase English vocabulary, demonstrating recognition of its educational benefits. However, opinions were mixed regarding whether DeepL eliminates the need to learn English vocabulary, indicating varied perceptions among respondents. Additionally, students acknowledged DeepL's role in

understanding English text, noting that its results are clear and comprehensible, which is beneficial for proofreading and enhancing writing skills, underscoring its utility beyond mere translation. Nonetheless, there are notable concerns and uncertainties, particularly regarding its impact on academic performance and its effects on traditional learning methods, such as vocabulary retention.

A total of 48.53% of students chose strongly agree that DeepL helps students gain technological literacy, 47.06% chose agree, 1.47% chose neutral and 2.94% chose disagree that DeepL with DeepL can gain technological literacy. A total of 45.59% strongly agreed, 52.94% agreed, and 1.47% were neutral to the statement that DeepL has many features that facilitate the translation process. In the next statement which states that DeepL can save time when doing English assignments, as many as 50% strongly agree, 47.06% agree, and 2.94% disagree with this statement. In the statement stating that DeepL increases English vocabulary, 35.29% strongly agreed, 60.29% agreed, and 4.41% were neutral. As the results of Sidiq, (2024) stated students agree that DeepL can help enrich vocabulary. A total of 51.47% of students strongly agreed, 44.47% agreed, 2.94% were neutral, and 1.47% disagreed that the translation alternative DeepL helped the process of translating English texts. A total of 57.35% strongly agreed, 39.71% agreed that DeepL helps in understanding English texts, 1.47% were neutral, and 1.37% disagreed. 39.71% strongly agreed, 48.53% agreed, 4.41% were neutral, and 7.35% disagreed that with the help of DeepL, there is no need to use a dictionary.

In the statement stating that DeepL translation results are easy to understand, 52.94% strongly agreed, 41.18% agreed, 4.41% were neutral, and 1.47% disagreed. In the statement stating that DeepL reduces vocabulary memory, 82% strongly agreed, 27.94% agreed, 13.24% were neutral, 20.59% disagreed, and 4.41% strongly disagreed. In the last statement, 42.65% strongly agreed, 48.53% agreed that DeepL helps correct and improve writing, and 8.82% were neutral. Based on an experimental study conducted by Polakova & Kllimova, (2023) revealed that the DeepL tool appears to be an effective learning tool for the development of formal writing skills as students' writing skills.

Table 4. Ethics of Using DeepL in Learning English
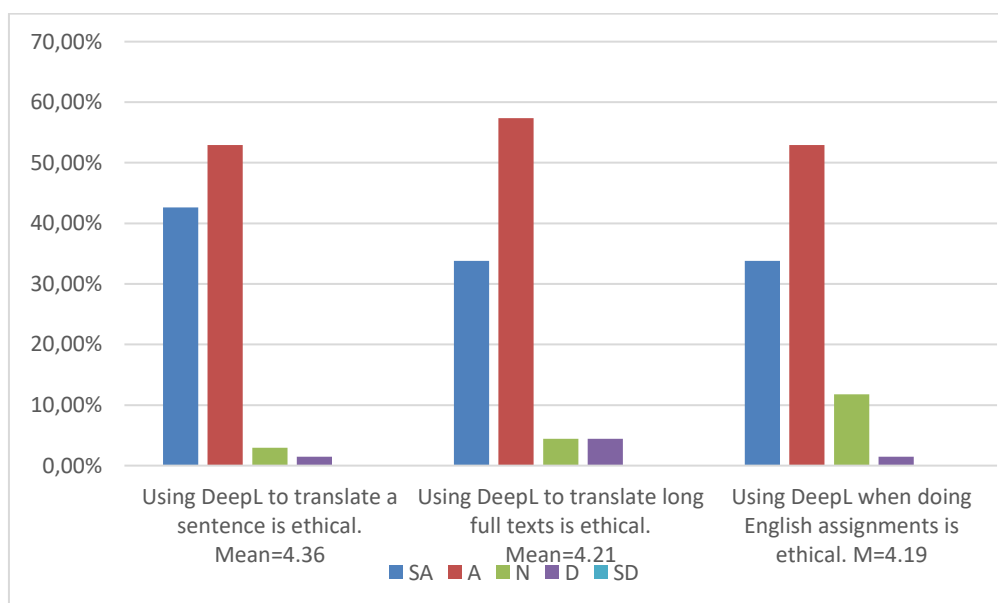
The third section provides insights into students' perceptions regarding the ethical use of DeepL in various contexts. A significant majority of students view using DeepL to translate individual sentences, and long texts, and complete assignments as ethical. Regarding the ethicality of using DeepL to assist with English assignments, a substantial majority believed this to be acceptable. While there was a notable proportion of neutral responses, the overall sentiment leaned towards ethical acceptance. According to (Kimera et al., 2024), humans combine their cognition, cultural upbringing, life experiences, and moral education to form intricate networks that guide their ethical judgments. Ethics is primarily concerned with individuals and their choices, and is also influenced by backgrounds, and cultures implemented in the surrounding environment, and based on the results of this research, most students think that using DeepL to translate a word, a long complete sentence, or to help do the task is an ethical thing.

A total of 42.65% of students strongly agree, 52.94% agree, 2.94% are neutral, and 1.47% disagree that using DeepL to translate a sentence is ethical. Nearly all of the students view using DeepL to translate a sentence as ethical. This suggests that many students believe it is acceptable to use machine translation for smaller, less complex tasks like translating sentences. A total of 33.82% of students strongly agreed, 57.35% agreed, 4.41% were neutral, and 4.41% disagreed that using DeepL to translate long full texts is ethical. A significant portion believes it is ethical to use DeepL for translating long full texts, and a small but notable percentage disagreed that using DeepL for long full texts is ethical, indicating concerns about the appropriateness of relying solely on machine translation for complex and comprehensive texts. A majority find it ethical to use DeepL when doing English assignments. A total of 33.82% of students strongly agree, 52.94% agree, 11.76% are neutral, and 1.47% disagree that using DeepL when doing English assignments is ethical, as Ata & Debreli (2021) result, for reading and writing assignments, 53.9% and 53% of participants considered OMT use ethical or completely ethical. The results reflect a generally very good perception among students regarding the ethical use of DeepL, particularly for smaller tasks like translating sentences.

CONCLUSION

The researcher has determined that students' perceptions of the applications of DeepL as a translation machine in English language learning. The results reflect a generally good and very good perception among students regarding the students' knowledge of translation, usability, and ethical use of DeepL. DeepL has several advantages that are utilized to enhance student's learning process in English language learning, based on the study's results that have been presented. By using DeepL, students may strengthen their technological literacy while obtaining accurate translation results. DeepL's translation results are also easily understood, offer helpful translation alternatives, and assist in improving student writing which the use of DeepL students consider ethical to use to translate learning or doing English assignments. In addition to having many benefits, DeepL also has disadvantages or impacts of using DeepL in learning English including reducing vocabulary recall for some people.

The findings of this research on student perceptions of DeepL are still quite limited. Future researchers conducting similar studies should expand their objectives and focus more deeply on the areas of interest. Future studies could explore the reasons behind these perceptions, investigate how educators can promote the responsible use of machine translation tools, and develop guidelines to help students navigate the ethical dilemmas associated with their use.

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