Unveiling the Effectiveness of Google Translate: A Health Text Translation Analysis

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ABSTRACT

Translators faced challenges due to limited vocabulary, leading to reliance on tools like Google Translate; this study evaluates the quality of Google Translate in rendering English health texts into Indonesian using Rochayah Machali's framework, employing a content analysis quantitative design on 32 Jakarta Post texts. Upon analyzing the data, the study revealed notable findings. Out of the 32 texts, Google Translate exhibited commendable translation abilities, with 11 translations (34.375%) falling into the 'good' category, 9 translations (28.125%) in the 'very good' category, 7 translations (21.875%) deemed 'almost excellent,' 3 translations (9.375%) categorized as 'fair,' and 2 translations (6.25%) rated as 'bad.' It indicating that Google Translate is a viable solution for comprehending foreign language texts, particularly in health-related contexts.

INTRODUCTION

Living in a globalized world, it is inevitably that individuals will engage with others in diverse languages, leading to communication challenges across different countries. This linguistic diversity, exemplified by variations between Indonesian and English, underscores the need for effective translation solutions to bridge understanding. Translation, as more than a mere linguistic conversion, involves transferring messages and meanings while considering cultural nuances, necessitating a deep understanding of both source and target languages (Putri, 2019).

Each culture has its own way of translating languages (Shea, 2022; Horbačauskienė et al., 2016). When translating from the source language to the target language, the translator must comprehend the background knowledge of both the source and target languages to ensure that cultural traditions can be effectively conveyed into the existing culture of the target language (Mohebbi, 2023). Serving as intermediaries between two distinct languages, translators must grasp the differences between them, enabling them to accurately transfer meanings and messages from the source language to the target language (Mohebbi, 2023; Shea, 2022). In the process of translating from one language to another, nearly all translators are likely to encounter difficulties.

In general, most people have limited abilities in mastering a foreign language, whether it's their mother tongue or national language. When faced with such limitations, individuals seeking to communicate a message, be it verbal or written, for example, from English to Indonesian, may require translation services. Translation is not exclusive to human effort; machine translators have also become prevalent. Initially, limited to translating words and phrases, the evolution of machine translators now extends to translating sentences, paragraphs, and even complete manuscripts and books. One prominent example is Google Translate, a free online translation service that also supports Indonesian translation. However, it's important to note that Google Translate, being a machine translation service, comes with inherent weaknesses (Shukla et al., 2023; Stapleton & Leung Ka Kin, 2019; Groves & Mundt, 2015; Komeili et al., 2011; Lear et al., 2016). Specifically, when translating sentences or paragraphs, Google Translate may produce confusing and occasionally unreasonable results. However, it is undoubtable that Google Translate has become one of the most prominent tools in the field of translation due to its easy access and popularity.

Numerous studies, including those by Hidya Maulida (2017), Reem Alsalem (2019), Aria Septi Anggaira, Muhamad Sofian Hadi (2017), and Jin and Deifell (2017), have shed light on various aspects of using Google Translate. While

students appreciate its speed and convenience, they acknowledge weaknesses in translation accuracy and overreliance on the tool without verification. Errors in linguistic aspects, as identified by Anggaira and Hadi, further highlight the challenges associated with machine translation. Jin and Deifell's research reinforced the notion that Google Translate serves as a supplementary tool for language learners but falls short in providing clear explanations and context.

Upon reviewing previous research, the researcher identified a notable research gap marked by recurring complaints regarding the accuracy of Google Translate. Researchers reported instances where translation results were occasionally inaccurate, necessitating users to realign them with the correct context. Notably, the accuracy of Google Translate seems contingent on translating the source language verbatim into the target language, with less reliability when translating text per sentence. Motivated by these concerns, the researcher initiated this study to comprehensively assess the quality of Google Translate. Utilizing 32 health-themed articles from the Jakarta Post, the study aims to delve into the extent of Google Translates' limitations. The Jakarta Post, an English-language daily newspaper in Indonesia since April 25, 1983, provides a substantial source of well-edited texts for this analysis, encompassing headlines, editorials, articles, opinions, and global news. This research seeks to shed light on the intricacies of Google Translates' performance, contributing insights into its limitations and offering a nuanced understanding of its functionality in translation tasks.

RESEARCH METHOD

This research employs a descriptive quantitative research approach to evaluate the quality of Google Translate as a translation tool. Descriptive research encompasses various fact-finding methods aimed at describing existing phenomena with precision. It serves as a research method to depict current situations as accurately as possible, characterized by the researcher lacking control over variables and only reporting observed events. Descriptive research includes sub-types like surveys, correlation research, qualitative research, or content analysis, which may involve

either quantitative or qualitative analysis (Merriam & Tisdell, 2015). In this study, quantitative analysis is utilized as the primary data, represented numerically, to measure and describe the quality of translations achieved through Google Translate. This approach is chosen to address the research problem and assess the impact of variables, contributing to a comprehensive understanding of the translation tool's effectiveness.

Data Collection Techniques

The data collection technique involves collecting and measuring information about the target variables, where subjects answer questions and assess the results. For this study, data was collected using Google Translate from health translations on the official website of the Jakarta Post online newspaper. The research process comprises three steps. Firstly, the researcher translates English text from the Jakarta Post into Indonesian using Google Translate. Secondly, the quality of the translation products is assessed based on the Rochayah Machali Translation Assessment (Machali, 2000). Thirdly, the quality of the translation is categorized as almost excellent, very good, good, fair, or poor. Finally, percentages are calculated for each category.

Data Analysis

The researchers use the percentage formula to calculate and categorize the number of Google Translate translation qualities, the researcher applies the following formula:

P=n/N x 100 %

P = Percentage

n = Number of the same score

N = Number of samples

FINDING AND DISCUSSION

Findings

As a source of data in this research is the translation of 32 Jakarta Post texts by Google Translate. The English text is the source text and the result of the translation so that it functions as the target text, namely Indonesian. Researcher took 32 texts from the same theme in Jakarta Post. Jakarta Post has many types of themes, see the table. In this study, the researcher chose the health theme for several reasons. The Jakarta Post newspaper is an attempt to provide information to foreigners and Indonesians about the actual situation in Indonesia or abroad with correct information. The Jakarta Post is also created in order to anticipate false reports. The Jakarta Post is expected to be a good source of news, thoughts, and aspirations. In this research, researcher analyzed the translation quality of Google Translate in translating text using a rubric instrument.

After analyzing and scoring the translation products of Google Translate, so the researcher found that the highest category is good with 11 translations (34.375 %), very good with 9 translations (28.125 %), almost excellent with 7 translations (21.875%) fair with 3 translations (9.375 %), and bad with 2 translations (6.25%). The graph below shows all of them. This sub section should be written in capital letter in the first letter, 12pt, bold and italic. This sub section displays the data or information obtained through the correct procedure of the aforementioned research method. The findings also should answer the research question(s) stated.

Table 1. the Category and Percentage of Text

No.	Category	Number of the Data	Total	Percentage
1	Almost Excellent	3, 5, 12, 18, 20, 24, 29	7	21,875
2	Very Good	4, 6, 9, 13, 14, 16, 28, 31, 32	9	28,125
3	Good	1, 7, 11, 15, 19, 21, 22, 23, 26, 27, 30	11	34,375
4	Fair	2, 8, 10	3	9,375
5	Bad	17, 25	2	6,25
Total			32	100

Discussion

This research provides description of Google Translate quality. The objective of this research was to know the translation quality made by Google Translate and to find the percentage of Google Translate quality in translating texts. To measure the level of translation quality, the researcher must do comparisons between the source language text and the target language text. The researcher believes that the translation quality assessment instrument by Rochayah Machali can be used to measure the level of translation quality. There are various aspects contained in the quality of translation according to Rochayah Machali. In terms of translation quality, there are almost excellent translation, very good translation, good translation, fair translation, and bad translation.

In this research, the researcher acts to determine the category of each text by comparing the text with an instrument measuring the level of translation quality. From the analysis of the translation of Google Translate, it was found that 7 data are obtained which are translations that are included in the almost excellent category, 9 translations data are included in the very good category, 11 translation data are included in the good category, 3 data are included in the fair category, and 2 translation data are included in the bad category. This shows that the quality of Google Translate is in good category, because 11 of the 32 texts are included in the good category and the most categories.

After the classification, the researcher compared the results with previous research, first Noezafri Amar said in his thesis the results of the analysis of language errors and the use of matching strategies in the source text, with a qualitative research approach and case studies, to determine the level of accuracy of the English to Indonesian translation by Google Translate. Of the 13 data sources, only 4 data or 31% are accurate translations, 7 data or 54% are less accurate translations, and 2 data or 15% are inaccurate translations. Thus the level of reliability to an accurate level is only 31%. While about half of them are less understood (Amar, 2013). This study and previous studies have differences in assessment indicators. Previous

research showed 31% of the translation results were at an accurate level, while this study showed 34% were in the good category. So the point of analysis of previous research and this research showed that translation using Google Translate is good.

The next identical research was done by Brevian Rival R (2019). He said that Google Translate has a lower error rate. Google Translate in translating words, phrases and clauses that contain the number aspect has an accuracy of 9 out of 10 data, while ITtranslate has an accuracy rate of 8 out of 10 data. In translating words, phrases and clauses with the persona aspect, Google Translate managed to correctly translate 13 of the total 13 data, while ITtranslate managed to correctly translate 12 of the 13 data tested. In translating the aspect of time, GT translates 10 out of 13 data, while IT translates 6 out of 13 data. The conclusion is that Google Translate in translating text from English into Indonesian there are still errors in aspects of number, persona/pronoun and tense. But overall, Google Translate produces translations with fewer errors.

The next research from Hossein Bahri (2016), they tried to answer questions about the use of Google Translate as a supplementary tool for helping international students at Universiti Sains Malaysia (USM) to learn and develop their knowledge and skills in learning Bahasa Malaysia (Malay Language). They found that Google Translate can be used as an additional tool for learning a language, most students find it great to use Google Translate as an additional tool to study Malaysian Language courses. Previous research looked for the use of Google Translate as a tool, and in contrast this study looked at or measured the quality of Google Translate. This research resulted in the quality of Google Translate translation with dominant results in the good category. This shows that Google Translate is worth using as a translation tool.

Almost the similar study was conducted by Iwan Kurniawan (2016). He tried to answer questions about the quality of the students' translation abilities in of UIN Raden Intan English Department. He found that the sequence of translation ability

category is very good, fair, good, bad, and almost excellent. The percentage of students translation abilities of UIN Raden Intan English Department are very good with 9 students (33.4 %), fair with 8 students (29.6 %), good with 5 students (18.5 %), bad (14.5 %), and almost excellent 1 student(3.7%). Previous research and this study have the same tool in measuring translation quality, namely the assessment of Rochayah Machali's translation quality. But there is a difference in terms of the quality measured. In previous studies, researchers measured the translation quality of English students at UIN Raden Intan with dominant results in the very good category, while this study measured the translation quality from Google Translate with dominant results in the good category. So it can be concluded that the results of the translation by UIN students are better than the results of the Google Translate translation. So Google Translate can be used as a tool for students who find it difficult.

The results of this study indicate the fact that in translating text from one language to another, Google Translate can produce varied in translating abilities such as almost excellent, very good, good, fair, and bad. In addition, many factors cause translation errors such as grammatical errors, missing words, production of different meanings, word order, and word choice. This finding has similarities with previous research in terms of Google Translate capabilities.This sub section also should be written in capital letter in the first letter, 12pt, bold and italic. This sub section discusses the interpretation and the implication of findings and their relations to the theories or previous findings.

CONCLUSION

In conclusion, the evaluation of Google Translates' translation abilities based on the health-related texts from Jakarta Post reveals the following percentages: almost excellent (21.875%) with 7 translations, very good (28.125%) with 9 translations, good (34.375%) with 11 translations, fair (9.375%) with 3 translations, and bad (6.25%) with 2 translations. The analysis indicates that Google Translate consistently performs well, with the majority falling into the good category,

accounting for 34.375% of the translations. Consequently, it can be inferred that Google Translate serves as a viable solution for comprehending texts in a foreign language, such as English. The translation capabilities encompass almost excellent, very good, good, fair, and poor categories, with the order being good, very good, almost excellent, fair, and bad. Considering the analysis results, it is concluded that Google Translate is suitable as a translation tool, with the caveat that users should verify the translation results for accuracy.

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