

Translation Machine as Learning Tools in Language Learning: A Perception of Undergraduate Students of Universiti Teknologi MARA (UiTM), Malaysia

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Abstract

There are many different languages spoken throughout the world. While certain words are simple to learn, others are more difficult to comprehend. People can occasionally become confused when learning a new language due to the differences in linguistic structures. Due to this, employing translation engines to aid with language comprehension has become more widespread. In conjunction with this, this study intends to seek UiTM students' perceptions on the use of translation machines as learning tools in language learning. The purpose of this study is to find out how students feel about using translation machines as language study aids through the use of a quantitative method. The results demonstrated that the study area had no bearing on how students perceived translation software as a teaching aid. This demonstrates that even language studies majors have a favourable opinion of translation machines. The implications of this study were further discussed.

Keywords: *Language Learning, Perception, Translation Machine, UiTM Students*

Introduction

Wei (2020) believed that people use different languages to communicate with other people. In this time and age, knowing various languages has become one of the attractive advantages to many people. According to Tilavova (2021), the world is becoming increasingly globalized and knowing a second language opens up the opportunity for being part of a community with a different culture, and learning more about the world around us. According to Bolitho & Rossner (2020), a lot of universities have made the acquisition of a third language compulsory with the justification to help their graduates to secure more work opportunities. However, learning a new language is proven hard because of the different structure in each language (Zhao & Lai, 2023).

Marito and Ashaari (2017) stated that many people wherever in public, at school, at society, and even in the business environment use machine translation as the translator. Using a translation machine can help people to understand various languages. Kane (2021) stated that a translation machine is a computer software that helps to translate language to another language. Nowadays people can just use a translation machine through their smartphone to help them translate different languages. The use of these online tools has made for easier living (Alkhatnai, 2019). However, it is proven that sometimes the translation machine could also make mistakes because some words have various meanings. There are three issues with machine trans-

lation, according to Lee (2021). One of them is Ambiguity, which the term is said to be lexically ambiguous if it has multiple meanings. A phrase or sentence is considered to be structurally ambiguous if it can take on more than one structure. Lexical and mismatches are issues that arise when two languages employ the same structure for two different purposes. In the local context, a public university in Malaysia has made it compulsory for their students to take a third language during their studies. To help them understand the course that they take, the majority of students will use a translation machine to help them with their assignment. Even though there are negative sides to the translation machine, it can be said that the majority of the time it has helped students to understand different languages better. Students also use translation machines during their studies.

Lee and Brigs (2021) in their study mentioned that translation machine has been used by a lot of people to help them understand different languages, as well as for academic purposes to help students during their studies. According to research done by Dorst et al (2022), it should come as no surprise that the usage of translation machines has also made its way into our educational systems since it enables us to access multilingual information and to directly communicate in foreign languages we have little to no expertise in. Translation machines help us to translate certain words or sentences that we don't understand. But sometimes translation machines could give different meanings to certain words because some words have various meanings to them. The findings of this study is aimed at showing that utilizing translation machines is advantageous for language learning. Students should capitalize on these benefits and incorporate them into their studies. Furthermore, society as a whole should leverage translation machines to enhance their linguistic proficiency. In multicultural countries with diverse languages spoken, such as ours, there's a valuable opportunity to expand our understanding of different languages.

Accessing translation machines has become incredibly convenient nowadays, making it imperative to use them to overcome language barriers effectively. Learning a new language, distinct from one's native tongue, can pose challenges due to differences in vocabulary and script. This underscores the significance of translation machines in bridging language gaps. This study aims to assess the efficacy of translation machines in aiding students' academic pursuits, providing insights that can guide students in deciding whether integrating translation tools into their studies is beneficial. In conjunction to this, this study was conducted to determine the students' perceptions on using translation machines as learning tools in language studies.

The main objectives of this study are:

1. To determine the students' general perceptions on using translation machines as learning tools in language studies.
2. To examine whether gender has any influence on the use of translation machines as learning tools in language studies.

3. To investigate whether fields of study have any influence on the perceptions on using translation machines as learning tools in language studies.

Literature Review

Translation machine has helped us to understand various languages. The usage of translation machines has significantly expanded due to the rise in demand for translation (Almutawa & Izwaini, 2015 as cited in Sabtan, 2020). These days translation machines can be used wherever you are as long as you have an internet connection. Students are one of the major users for translation machines. They will use translation machines to help them with their assignments. Sometimes to construct perfect sentences, they will also use translation machines to see whether the sentence has the same meaning as what they want to convey. Since most students know about Translation Machines, they have their own perception towards Translation Machines. According to Davidoff (1998), perception is also understood to be a process of receiving, choosing, organizing, interpreting, testing, and responding to a thing, an event, or a problem. Sensing, which is a stimulus that an individual receives through a receptor, particularly the senses, is a process that comes before perception. Students' perceptions reflect how, why, and what students learn. Students' perceptions on certain things can change based on what they know about it.

The definitions by Davidoff are relevant to the aims of this study because to determine students' perception we need to know why they feel a certain way. Because if the questionnaire is done by someone who does not use a Translation Machine, their opinion might differ from students that use a Translation Machine. There are various advantages to using translation machines as learning tools. According to a research done by Nino (2019) translations machines are widely available online, immediacy and multilingualism. Since translation machines are widely available online it is much easier to access it. This will easily help people to translate anything. The fact that free online machine translation (MT) is instant; all you need to do is choose the source and target languages, copy and paste the text or web page you wish to translate, and click a mouse button to get instantaneous results. This is a pre-made electronic product that the students can readily manipulate electronically. Lastly, translation machines are multilingual so they can translate various different languages.

Several studies have been conducted on translation machines as learning tools in language learning. Study conducted by Sujarwo (2022) aims to examine how students of English as a Foreign Language (EFL) view using machine translation (MT) to translate words, phrases, text, or speech. 13 EFL students who participated in the study using this form of technology were characterized and analyzed using the descriptive qualitative technique. The study uses qualitative descriptive research methods. This approach is also known as an artistic approach since the research is less structured, and it is also known as an interpretative approach because the research findings are more focused on the interpretation of field data.

In the studies done by Yanti (2019), the purpose of the study is to find out how students feel about Google Translate and how it influences their translating experience. The study concentrated on the benefits and drawbacks, as well as the issues and solutions related to using Google Translate. In this study, a descriptive strategy was employed. Nearly every student understood that without double-checking, Google Translate could not be reliable media. The students' translation task scores indicated that, while not excellent, Google Translate assistance with the translation was not poor either. Furthermore, students continued to learn and practice grammar and improved their translation skills due to Google Translate accuracy.

Methodology

Research Design

This study implements quantitative research or numeric description of a population by studying a sample of that population. According to Adedoyin (2020), quantitative research is known as the study of phenomena using numerical data and statistical, analytical, or computing tools. Moreover, Descriptive research is a type of analysis that focuses on outlining the features of the population or issue under study. This methodology places more emphasis on the "what" of the study topic than the "why" (Siedlecki, 2020). The survey approach is employed in this study. A survey was conducted by the researchers to determine the perceptions of a public university in Shah Alam, Selangor students think about translation machines as a learning tool for language learning.

Sampling

The setting of the research is UiTM Shah Alam and the respondents were the students from three faculties: Academy of Language Studies, Faculty of Applied Sciences, and Faculty of Business and Management. The sampling method employed in this research is purposive sampling technique.

Research Instruments

The instrument that is employed in this study is questionnaire. Respondents were asked to fill out a Google Form to observe their perceptions on translation machines as learning tools in language learning. The questionnaire is adapted from Students' Perceptions of Using Machine Translation Tools in the EFL Classroom, Sujarwo (2020). The questionnaire consists of 16 items. The results of the survey were evaluated using a Likert scale (1. Strongly Disagree, 2. Disagree, 3. Neutral, 4. Agree, 5. Strongly Agree).

Data Collection Procedures

The steps of a quantitative research technique outlined by Creswell and Creswell (2018) were used to gather the data for this research. The researchers have chosen the samples from the students of UiTM Shah Alam based on purposive sampling. The respondents were chosen based on their faculty, gender, availability and willingness to participate in the study. Next, the researcher constructed a questionnaire adapted from Sujarwo (2020) and conducted the test for reliability and validity. The questionnaire was then made available online by the researchers using Google Form. Due to the researcher's restricted ability to contact the respondents, an online questionnaire was chosen because it is practical and time-effective. The survey data were then examined using IBM SPSS Statistics Version 27.

Data Analysis

The data gathered were analysed using a statistical tool. Using IBM SPSS Statistics, both descriptive and inferential analysis were performed on the data. To compare the mean scores among the respondents' perceptions on translation machines as a learning tool for language learning, the descriptive statistics will be in the form of means, and the inferential statistics will be acquired through T-Test.

Reliability and Validity

According to Middleton (2023) Concepts like validity and reliability are used to assess the calibre of research. They demonstrate how effectively a methodology, method, or test measures something. Validity is concerned with a measure's precision, whereas reliability is concerned with a measure's consistency. The questionnaire used in this study is adapted from Sujarwo (2020) to ensure the validity. In other words, content validity guarantees that the survey accurately captures the variables it is designed to measure.

Findings and Discussion

In order to address the research questions, IBM SPSS software was used to analyse the data once it was gathered through the questionnaire. The goals were to respond to the three research inquiries listed which are:

1. What are the students' perceptions on using translation machines as learning tools in language studies?
2. Does gender have any influence on the perceptions on using translation machines as learning tools in language studies?
3. Do fields of study have any influence on the perceptions on using translation machines as learning tools in language studies?

The findings contain descriptive statistics for research question 1 meanwhile for research question 2 and 3 were employed using T-Test. It is derived from the survey conducted by the researchers, involving a total of 154 respondents. The demographic profiles of the respondents are displayed using the chart below. A pie chart will display the participation rate by gender and faculty members.

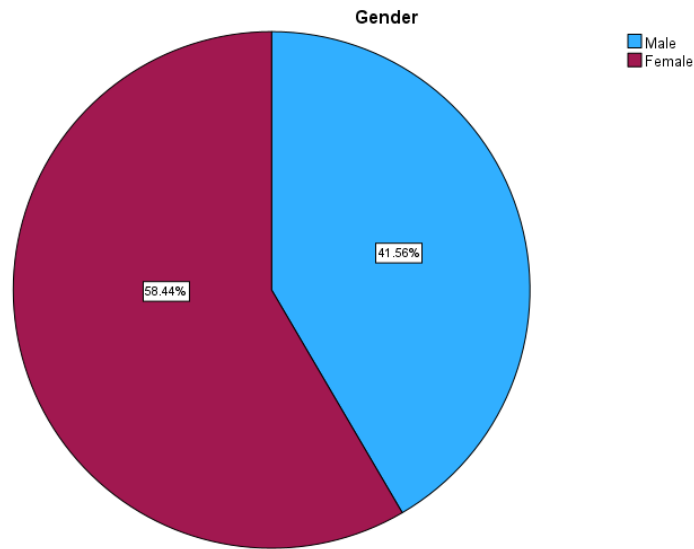


Figure 1: The gender of respondents

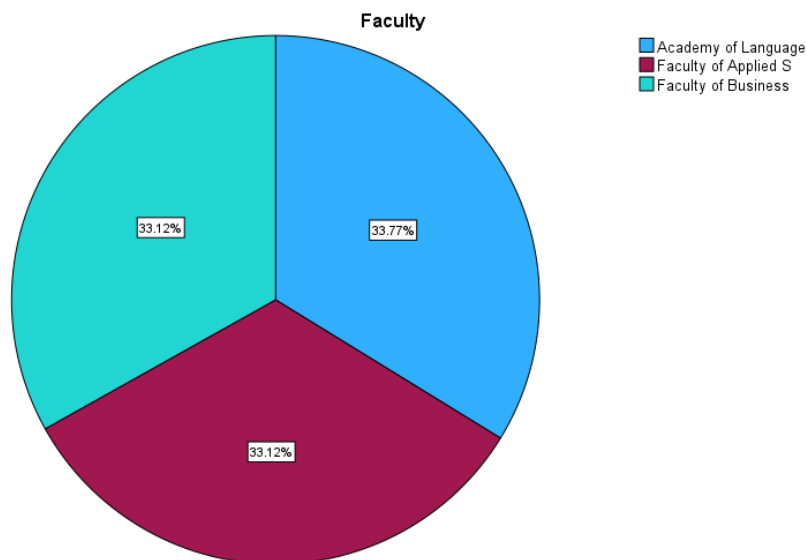


Figure 2: The percentage of the Respondents according to their respective faculty.

Research Question 1: What are students' perceptions on using translation machines as learning tools in language studies?

To determine the students' perceptions on using translation machines as learning tools in language studies, twelve questions were asked in the questionnaire.

Table 1: Descriptive Table of the T-Test results

Descriptive Statistics			
	N	Mean	Std. Deviation
Translation machines do help me in class.	154	4.16	.445
I find translation machines easy to use.	154	4.24	.458
Translation machines are important to me for language learning.	154	3.91	.708
Translation machines have affected me positively.	154	3.89	.622
Using translation machines has benefited me in language learning.	154	3.95	.624
Using a translation machine reduces my interest in learning different languages.	154	2.13	.905
I can find all the words that I was looking for using a translation machine.	154	2.94	1.074
I didn't face any problems while using the translation machine.	154	3.97	.676
Perceptions	154	3.65	.430
Valid N (listwise)	154		

Descriptive statistics for students' perceptions towards translation machines as learning tools reveal an overall mean score of 3.65 (SD=.43). This shows a student's positive perceptions of using translation machines as learning tools. The question with the highest mean values is "I find translation machines easy to

use.” with the values of 4.24. Meanwhile, “Using a translation machine reduces my interest in learning different languages.” got the lowest mean values of 2.13.

Research Question 2: Does gender have any influence on the perceptions on using translation machines as learning tools in language studies?

To determine whether gender has any influence on students' perceptions, an Independent Sample T-Test is conducted.

Table 2: Group Statistics on Gender

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Perceptions	Male	64	3.66	.408	.051
	Female	90	3.64	.447	.047

The gender-specific statistics are displayed in Table 2, which also provides information on the standard deviation, standard error, and mean perceived usefulness scores. 64 male students make up the male gender, and their perceived mean is 3.66 with a standard deviation of 0.41. The perceived mean for the 90 students in the female gender is 3.64, with a standard deviation of 0.45.

Table 3: Independent Sample Test

Independent Samples Test									
Levene's Test for Equality of Variances				t-test for Equality of Means					
		F	Sig.	t	df	Significance One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference
Perceptions	Equal variances assumed	.586	.445	.376	152	.354	.707	.027	.071
	Equal variances not assumed			.382	142.832	.351	.703	.027	.069

Based on the data in table 3. It can be inferred that both sexes view translation machines as valuable learning resources. The t-test result shows, $t(152) = 0.376$, $p > 0.05$, showed that there was no significant mean difference in Perceived Usefulness (PU) between males ($M = 3.66$, $SD = 0.41$) and females ($M = 3.64$, $SD = 0.45$).

Research Question 3: Do fields of study have any influence on the perceptions on using translation machines as learning tools in language studies?

Table 4: Group Statistics on Faculty

Group Statistics					
	Faculty	N	Mean	Std. Deviation	Std. Error Mean
Perceptions	Language	52	3.41	.410	.057
	Business Management	51	3.73	.395	.055
	Applied Science	51	3.81	.382	.053

The three faculties' data are displayed in Table 4. With a standard deviation of 0.41, the mean perceived for the 52 students in the Academy of Language Studies is 3.41. The mean perceived for the Faculty of Business and Management, with 51 students, is 3.73, with a standard deviation of 0.40. With 51 students, the Faculty of Applied Science is the third faculty. With a standard deviation of 0.38, the mean perception is 3.81.

Implication and Conclusion

This study sets out to investigate how students perceive translation machines as learning tools. A questionnaire is distributed to UiTM Shah Alam students to complete as part of this research. The study's findings indicate that most students see translation machines favorably as a learning tool. The outcome further demonstrates how translation machines help students with their studies. This research is done to examine the three research questions. The first research question is to examine the students' perceptions towards translation machines as learning tools. From the findings of the research, it is shown that students view translation machines positively. They use translation machines as learning tools and perceive them as an aid for them when learning language.

The second research question is whether gender influences students' perceptions towards translation machines as learning tools. This answer to this research question shows that gender does not play a role in student perceptions towards translation machines. Most students regardless of gender thought that translation machines actually benefited them when used for language studies. The last research question is Do fields of study have any influence on the perceptions on using translation machines as learning tools in language studies. The findings showed that the field of studies also did not influence students' perceptions to-

wards translation machines as learning tools. This goes to show that even students that major in language studies also view translation machines positively.

From the research conducted, it is evident that translation machines are beneficial to use for language studies. Students should take advantage of the benefits given to them and use it to help with their studies. Society should also use translation machines to help broaden their language. As we live in a country that consists of many different races that speak different languages, we should take this opportunity to broaden our knowledge about other languages. Nowadays, it is so easy to access any translation machine and it should be used to improve our language barriers. To conduct future research, it is better to broaden the topics of the research questions so that there is more insight on what students thought about translation machines. It would also be better to do a qualitative method so that the answer to certain questions is more specific and not just based on choices given. Learning a new language other than their mother tongue can be challenging because of the different words and writing used. This gives an important insight on why translation machines are important to help with language barriers. This study will help to determine whether a translation machine is effective in helping students with their studies. The findings can help students decide on whether using translation machines in their study is good or bad.

Author contributions

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Data availability statement

The authors confirm that the data supporting the findings of this study are available within the article [and/or] its supplementary materials.

Conflicts of interest

No potential conflict of interest was reported by the authors.

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