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Research Article

Saudi EFL (English as a Foreign Language) Students' Use and Attitudes towards Machine Translation in Language Learning

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Abstract

Learners of languages can benefit from the enhanced precision provided by machine translation (MT) applications. Millions of people around the world use MT on a daily basis. Whether these resources support or hinder English as a foreign language (EFL) education is a topic of increasing discussion. Some EFL students feel that machine translation (MT) applications help them communicate more effectively and swiftly. It's yet unknown, though, how MT will affect individuals' attitudes and perceptions. This study looked into how Saudi Arabia university EFL students perceived and used MT tools, what encouraged them to resort to MT websites and tools. A questionnaire was used as an instrument in this study. The participants were 37 female students of Imam Mohammed bin Saud Islamic University. The results revealed that almost all the students agreed upon the use of MT websites to do well in English classes. The most three frequent purposes for which EFL students used MT are as a dictionary, oral presentations, and cost-effectiveness. Future research should consider doing the study as an experiment instead of using a questionnaire, as this would provide higher quality and reliable data.

Keywords: Machine Translation; EFL Students; Attitudes; and Use of MT.

Introduction

Machine translation (MT) is a branch of computational linguistics and artificial intelligence (AI), is to create computer systems that can translate texts or speech between languages automatically. By offering rapid and precise translations, machine translation aims to improve communication and break down linguistic barriers. The potential of machine translation (MT) to transform students' language learning experiences makes it significant in the context of teaching English as a foreign language (EFL). Investigating how EFL students feel about MT sheds light on how useful these resources are for language learning. Negative attitudes could point out areas that require improvement, while positive attitudes might show that MT meaningfully contributes to language learning. Previous studies on the attitudes of students studying English as a foreign language (EFL) and machine translation (MT) have produced a variety of results, showing The Relationship between the Use of Technology and Technology Addiction in Learning Foreign Language [1]. The Impact of Machine Translation on Language Proficiency, [2] An investigation of machine translation output quality and the influencing factors [3]. This study is one of the few on MT conducted in Saudi Arabia because there haven't been many studies regarding it in the setting of EFL in Saudi Arabia. However, none of the studies examined the effects of MT tools on EFL students' learning.

Research Aim

The aim of this study is to investigate how EFL students' attitudes toward language learning in general are affected by using machine translation technologies, as well as what are the factors that encouraged them to use MT.

Research Questions

- What are EFL students' attitudes toward the use of machine translation tools for language learning in general?

- What factors encourage EFL students to use machine translation as a tool for learning?

Research Significance

It's possible that both EFL teachers and students will gain insights from this study. The study can assist teachers in comprehending the reasons behind students' use of machine translation and how to react to it. The effects of MT tools may be of interest to EFL students.

Research Delimitations

This study was limited to EFL students of the college of Languages and Translation in Imam Mohammed bin Saud Islamic university, in Saudi Arabia. This study was confined to two topics: the attitudes of EFL students and machine translation. Only a questionnaire was used in this study.

Literature review

Research on machine translation (MT)

Because machine translation (MT) can translate between languages quickly, it has become a transformative force in language acquisition and communication. In Saudi Arabia, where English is taught as a foreign language (EFL), it is critical to comprehend how students and teachers feel about machine translation. This review of the literature summarizes the body of knowledge, points out knowledge gaps, and lays the groundwork for future study on the relationship between Saudi EFL attitudes and machine translation. In the context of teaching English as a foreign language (EFL), machine translation (MT) is important because it has the ability to change students' language learning experiences. An understanding of the importance of these resources for language learning can be gained by looking at how EFL students feel about MT. While favorable attitudes could demonstrate that MT meaningfully contributes to language learning, negative attitudes might highlight areas that still need work. International research on the incorporation of machine translation into language learning environments is extensive. In his investigation, Smith (2018) uncovered both the possible advantages and disadvantages of machine translation as it relates to language learning [4]. Chen et a, (2020) looked into how machine translation might help with vocabulary learning [5]. On the other hand, little research has been done specifically on the Saudi Arabian EFL setting.

Machine translation (MT) and EFL (English as a foreign language) students' attitudes.

Language attitudes are shaped by the distinct linguistic and cultural environment of Saudi Arabia, which has an impact on educational procedures. Al-Hazmi (2017) looked at Saudi Arabian views on learning English, highlighting the significance of cultural elements [6]. Alshammari (2019) looked into how sociocultural factors affected Saudi EFL learners' English language ability and offered contextual insights [7]. Argument in Favour Smith, (2018) makes the case that machine translation can improve language learning by giving students instant access to translations, which will ease their comprehension and vocabulary development [4]. Contrary Argument Johnson, (2019) raises worries about learners relying too much on computerized translations without truly comprehending the language, which could impede true language comprehension [8]. The impact of sociocultural influences on EFL attitudes in Saudi Arabia is highlighted by studies such as Al-Hazmi (2017) [5]. Attitudes regarding MT in language learning may be influenced by cultural norms and values. Cultural factors may assist or interfere with the use of technology tools like machine translation (MT) in language learning, depending on how well they mesh with current cultural norms. Technology adoption has been evaluated using the Technology Acceptance Models (TAM), which (Davis ,1989) [9] proposed. Global models like TAM, however, might require modifications to account for cultural differences, according to Wang and Lin (2021) [10]. The applicability of TAM in the Saudi EFL context needs further scrutiny, considering the unique cultural and educational landscape of Saudi Arabia. There are still large gaps in the studies, despite the rising database of work. The Technology Acceptance Model, or TAM, was developed by Fred Davis (1989) [9] and is a popular theoretical framework for studying how users embrace technology. Perceived utility and ease of use are important factors in determining users' attitudes and intentions to utilize a technology, according to TAM. The ease of use of MT technologies and their perceived value in augmenting language acquisition may have an impact on the attitudes of EFL students toward MT.

Methods

Design of the Study

This study, which is descriptive in nature and utilizes quantitative data, investigated the attitudes of EFL students on the use of machine translation (MT) in language learning through use of a questionnaire. questionnaires are a significant research instrument that are widely used in many different sectors, for multiple reasons, including anonymity and privacy, large sample sizes, efficiency and cost-effectiveness, Dillman et al (2014) [11].

Participants

Based on convenience sampling technique, the participants of the study are female students of Languages and Translation department in Imam Mohammed bin Saud University Arabic is the first language of level ten students in Riyadh, who are between the ages of 22 and 25. Their level of proficiency is intermediate. The decision to choose level ten students is based only on the fact that they are familiar with MT programs and have worked with and studied MT throughout their academic years.

Research Instrument(s)

A. Students' perception questionnaire (EFL Saudi Students Attitudes towards Machine Translation)

Description of the questionnaire

This questionnaire was adapted from a questionnaire developed by Almusharraf and Bailey (2023). The questionnaire consists of two sections: the first section asks students about their demographic information. The second section included 24 items measuring the adapted technology acceptance model (TAM) variables including perceived ease of use (PEoU) with MT, perceived usefulness (PU) when using MT for learning, attitude to MT for learning, actual use of MT for learning, and intention for future use of MT for language learning. All items used a 5-point Likert scale to measure participants' responses, with options ranging from 1 (strongly agree) to 5 (strongly disagree).

Data Collection

Using Google Forms the electronic questionnaire was sent to university college students of level ten through WhatsApp groups.

Data Analysis

The data was analyzed using an Excel form. An excel sheet was used for the analysis of the student participants' questionnaire responses. Considering that Excel offered an appropriate statistical output for the examination of the data that was gathered for this study.

Questionnaire Reliability

The findings indicated that this study was reliable with a score of (0.63.)

Questionnaire validity

Contacted two jury members for their approval and any needed suggestion towards the research in general. Both provided the researcher with insightful comments and approved it at the end.

Results and Discussion

N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Machine translation websites help me do well in my English class.	0	2	3	11	22
	Machine translation websites help me get higher grades in my English courses.	0	0	5	12	20
	Machine translation websites are helpful for writing English paragraphs or essays.	0	1	5	6	24
	Machine translation websites are helpful for doing English assignments.	0	2	1	11	23
	Machine translation websites help me understand difficult concepts discussed in class.	0	2	6	9	20
	Machine translation websites help me learn new vocabulary.	0	1	4	10	22
	Machine translation websites help me express more ideas in English.	0	0	5	12	20
	Using machine translation websites for learning is a good idea.	1	0	5	12	19
	Machine translation websites are an attractive way to learn English.	0	2	8	9	18
	I like using machine translation websites for learning English.	0	1	8	10	18
	Machine translation websites motivate me to study English harder.	1	3	9	10	14
	Machine translation websites are easy to use.	0	0	5	13	19

Machine translation websites are clear and understandable.	0	1	9	11	16
I can easily understand the translations produced by machine translation websites.	1	1	8	12	15
1I will use machine translation websites in the future to study English.	0	3	5	9	20

Table 1: Answer to the first research question.

Table 1 shows that the majority of the students (56.8%) agreed that MT Websites help them do well in English classes. Moreover, (54.1%) of them found it helpful in getting higher grades in English classes. While (64.9%) agreed that MT websites are helpful for writing English paragraphs or essays. (62.2%) of students agreed that MT websites are helpful for doing English assignments. (54.1%) of students agreed that MT website helps them understand difficult concepts discussed in class. (59.5%) of students found that MT website helps them learn new vocabulary. (54.1%) agreed that MT website helps them express more ideas in English. (51.4%) of students found that using MT website for learning is a good idea. (51.4%) of students argued that MT websites are easy to use. Majority of the students (59.5%) found it useful to use MT websites for writing. (54.1%) of students agreed to use MT in the future to study English.

	When is it most useful or appropriate to use machine translation websites?	(For reading comprehension of a text) 9	(For double-checking what you wrote in English) 17	(For revising) 13	(While editing) 19	(While writing) 22	(For pre-writing (planning and outlining) 14	(As a dictionary) 21	(For preparing oral presentation) 19
1									
2	In your opinion, what factors encourage you to use machine translation as a tool for language learning?	(Unsure of my language skills) 4	(For writing) 6	(For double-checking grammar) 4	(For double-checking spelling) 10	(Cost-effectiveness) 11	(All the above) 2		

Table 2: Answer to the second research question.

What motivated students to use MT? Was the second research question, as presented in Table 2. Students were urged to use MT websites for a few things, (56.8%) of students used MT websites as a dictionary, (51.4%) of students used them for preparing oral presentation, (29.7%) affordability, (27%) spelling check, and (16.2%) for writing. The results of this study were significantly related to Almusharraf and Bailey's study (2023.) As both Saudi EFL students expressed similar responses for their reason behind using MT tools and websites.

Discussion

The findings of this study provide insight into the field of education more specifically EFL learners. Students showed a high level of acceptance towards MT tools. Students frequently used MT tools despite the reported concerns about accuracy mistakes. The use of MT is looked at negatively by teachers and educators. Machine translation is a useful tool that can help make learning easier. In this study the results showed that (59.5%) of students found it useful to use MT. MT is essential for students, it can function as a dictionary which was approved by (56.8%) of students

who participated in this questionnaire. The findings of this study are significantly related to Almusharraf and Bailey's study (2023) [12] where both Saudi EFL students expressed a need to use MT tools going forward and acceptance of their use. The results of this study are quite like Alhaisoni and Alhaysony's study (2017) [13] where both EFL students frequently used MT programs to look up meaning of unknown words, writing assignments, and reading an English textbook.

Conclusion

MT is an important subfield of computational linguistics. In this study a number of things were discovered, which are the importance of MT websites to EFL learners. (54.1%) of students agreed to use MT in the future to study English. (64.9%) agreed that MT websites are helpful for writing English paragraphs or essays, which shows that the majority of students use MT websites for learning purposes. If teachers offered helpful MT websites that can help students develop their grammar, spelling, and pronunciation it will help them with the instructor's guidance. Limited time and access to necessary websites can restrict the

scope and quality of research. A suggestion for future studies is that the investigator conduct the study as an experiment rather than using a questionnaire, for results, it would be more accurate and reliable.

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Appendix

The final version of the questionnaire

Title: Saudi EFL (English as a Foreign Language) Students' Use and Attitudes towards Machine Translation in Language Learning.

Actual use

1. Machine translation websites help me do well in my English class.

2. Machine translation websites help me get higher grades in my English courses.

3. Machine translation websites are helpful for writing English paragraphs or essays.

4. Machine translation websites are helpful for doing English assignments.

5. Machine translation websites help me understand difficult concepts ☐discussed in class.

6. Machine translation websites help me learn new vocabulary.

7. Machine translation websites help me express more ideas in English.

Attitude

8. Using machine translation websites for learning is a good idea.

9. Machine translation websites are an attractive way to learn English.

10. I like using machine translation websites for learning English

11. In your opinion, what factors encourage you to use machine translation as a tool for language learning.

Perceived ease of use

12. Machine translation websites motivate me to study English harder.

13. Machine translation websites are easy to use.

14.   Machine translation websites are clear and understandable.

15.   I can easily understand the translations produced by machine translation websites.

16.   When is it most useful or appropriate to use machine translation websites.

Future intention

17.   I will use machine translation websites in the future to study English.