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AI Tools and Saudi University English Translation Students: A Mixed-Methods Study Based on TAM

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***Abstract*—The study aims to explore the acceptance and utilization of AI tools in translation courses by English language learners in Saudi Arabia using the Technology Acceptance Model (TAM) to enhance their professional translation skills. For data collection purpose, the study employed a mixed-methods design, combining a survey of 114 bachelor's and master's translation students with in-depth interviews of 10 participants. This approach explored students' perceptions, usage patterns, and barriers to AI tool adoption. The inclusion of diverse academic levels enriched the findings and enhanced the study's relevance to broader translation education context. The study investigates three research questions that focus on Saudi EFL students' adoption rate of AI tools for translation, their participation with these tools, and their perceptions regarding the integration of AI in translation practice. The study revealed that the majority of Saudi Arabian translation students learning English as a foreign language found AI tools useful. However, they expressed concern about the potential negative impact of overuse on their translation skills. Furthermore, the findings highlight the need to integrate AI tools into university curricula to better prepare students for the demands of today's translation industry. The results indicate that translation courses at universities need to include the integration of AI tools to train students effectively for the evolving industrial requirements and technological landscape. This research contributes to the growing body of studies on using AI tools in language education and advocates for including AI literacy education within language programs to enhance translation and academic writing achievements.**

***Index Terms*—AI in education, artificial intelligence, EFL, translation studies, technology acceptance model**

I. Introduction

AI revolutionized animation and robotics before transforming into an essential tool for humanity (Navon, 2021) by developing neural machine translation (NMT), computer-assisted translation tools (CAT) and AI-powered terminology databases (Drugan, 2013; Doherty, 2016). The implementation of AI tools in translation courses has noticeably improved the translation abilities of translation students and their proficiencies (Deng & Yu, 2022). These technologies enable translation workflows to become more efficient and consistent while providing better accessibility. AI tools are expected to enhance translation students' skills further due to their innovative implementation in teaching which adjusts to the changing language learning parameters (Li et al., 2023). The contemporary era sees widespread adoption of AI tools in translation software which continues to expand its usage. Educational institutions need to assess how students view AI tools and their usage patterns to create timely curriculum adjustments which prepare future translators for the industry requirements. The adoption of AI tools in software development demonstrates the necessity to transform educational methods for creating software that meets community needs (Chimbunde & Jakachira, 2024; Mohammed, 2023). Therefore, the implementation of AI tools into EFL translation curricula follows the global demand in educational innovation.

However, the pace of AI tools integration in Saudi Arabia's educational institutes seems slower compared to other international peers even though the adoption of AI tools in education receives high priority and remains a continuous process in the country (Alhaisoni & Alhaysony, 2017). The Technology Acceptance Model (TAM) provides a theoretical structure to evaluate new technology adoption by users based on perceived usefulness (PU) and perceived ease of use (PEOU) to encourage translation students to innovate through practical competency development. The TAM model shows broad application in educational technology research (Venkatesh & Davis, 2000; Scherer et al., 2019) but few studies have evaluated its applicability to translation training that includes the implementation of AI tools among Saudi EFL students. Therefore, the need to teach students how to use AI tools in these courses continues to exist, alongside studying how AI and computer-aided translation (CAT) practices shift toward more advanced AI-powered tools, which are gaining

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popularity (Massey, 2021). As a result, the rising use of AI tools in professional translation (Bowker, 2020) demands researching students' acceptance and utilization to establish alignment between academic education and professional requirements.

The classroom instruction becomes more effective and relevant through Contextualized Educational Approach (CEA) combined with equitable evaluation methods. The application of AI tools in translation faces substantial obstacles because of its functional constraints together with ethical problems and digital access barriers. Therefore, this study bases its findings on survey data from 114 students along with qualitative data stemmed from focus-group interviews with 10 students studying translation to explore the experiences of Saudi students studying translation courses with AI tools. The study produces important findings that provide important recommendations that could help in the development of educational policy together with curriculum design and pedagogical methods. Meeting these goals is particularly pivotal for ensuring that translation programmes match the fast progression of technology, adhere to the changing requirements in the labour market, and preparing translation students to adapt to these changes.

A. Significance of the Study

The integration of AI tools into the teaching of translation has become essential because of the technological advancement that reached most sectors, including businesses, academia and communication. The use of AI tools has expanded because of its extensiveness, where technology now performs tasks that were used to be done manually, and because of their intensiveness, where they continue to receive constant development. Therefore, the educational system in Saudi Arabia needs to implement technology in order to bring essential and promising changes to its English as a Foreign Language (EFL) student programmes. This is particularly important because Saudi Arabia is on the path of establishing itself as a leading international exchange centre that combines cultural and economic activities. The need for accurate language translation that understands technical details, cultural elements and complex aspects has become essential during this present era. Thus, this study fills an important research gap through an examination of translation student interactions with and perceptions of AI translation tools in Saudi Arabia. It is hoped that the research findings about the students' usage of AI tool in translation will drive improvements in their technical capabilities and prepare them for the increasing translator needs in Saudi Arabia's expanding professional sectors. It is also hoped that the research findings will be useful for educational institutions to detect both the advantages and disadvantages of implementing translation AI tools, which would result in a better integration of these technologies into teaching their programmes and curricula.

B. Curriculum Design

The results of this study will help decision-makers in Saudi educational institutions such as the Ministry of Education together with universities to redesign their translation education programmes to improve them. In order to do so, this research examines a group of bachelor's and master's students' experiences with AI tools for translation work to identify their unique difficulties. Educators can create better translation education programmes by using this information to integrate AI tools properly while teaching students the essential technical competencies along with critical thinking abilities needed for current translation industry work. This research will also demonstrate to students how to deal with moral dilemmas that result from using AI translation tools, while upholding high standards of accuracy and quality in their work.

C. Language Education

The result of this research is expected to impact language education by demonstrating how AI tools are implemented in the teaching of translation, especially in higher education in Saudi Arabia. In doing so, this study evaluates the ways of which AI tools enhance student language abilities, their cultural knowledge as well as the precision of their translation skills to provide practical methods for using these tools alongside conventional teaching practices. This research demonstrates how AI technologies build interactive educational spaces that help students acquire language abilities while developing the necessary skills of using modern technological platforms. As Saudi Arabia is modernising its educational system, it should include AI language tools training because this will help graduates to meet global translation industry requirements with both linguistic expertise and technological competencies.

II. Literature Review

Recent research has focused on the impact of AI tools on the teaching of translation through organised educational programmes at university and institutional levels (Karataş et al., 2024). The focus has been on measuring the influence of AI tools on educational approaches and the learning process of the students and their translation skills, cementing its value in the modern globalised world (Massey, 2021; Suh, 2020). For example, individuals—including teenagers—seem to prefer online learning because of its accessibility via mobile devices and its easy access through online platforms. This trend has become even more common since the breakout of COVID-19 pandemic in 2019. Many professions transitioned toward becoming sedentary and, therefore, there has been a need for using modern computer features found in mobile phones that drove up the demand for quick and precise real-time operations. Although digitalisation has become in almost every human life, education remains unaffected by this trend even though AI-powered translation functions as an essential

educational and professional translation practice (Moneus & Sahari, 2024). Therefore, educators and students may need to start thinking about accepting the fact that AI translation and interpretation tools are most likely staying permanently in their field.

There are several studies that have tackled the idea of introducing AI tools in education and translation. For example, Heh et al. (2020) assert that AI tools should be adjusted according to specific circumstances which are most appropriate for translation tasks. The selection of appropriate contexts and document types and genre types requires specific guidelines and principles. Heh et al. (2020) further explain that all papers cannot receive equal treatment since different texts need either human translation, AI tools assistance, or a combination of both methods for reliable results. Therefore, these aspects lead to the requirement for teaching future translators to master AI capabilities and distinguish between tasks that require AI tools and those that require manual or combined approaches while maintaining reliability and accuracy.

Furthermore, educational institutions need to produce AI-enabled professionals who could meet learner and occupational needs. Therefore, training students for translation requires teachers to maintain technical expertise, professional experience, cultural understanding, and cross-cultural communication abilities. Teachers are also required to have expertise in teaching translation that include emotional intelligence for complex texts as well as practical experience with CAT and MT tools (Cheng et al., 2022). Moreover, some surveys show that technically expert translators with experience in CAT and MT tools are in high demand by the market. The market demand for translators with machine translation expertise demonstrated a projected 7.1% annual growth rate from 2022 through 2027. Nevertheless, educational institutions face challenges to incorporate AI-powered resources into their programmes, which forces them to transform their teaching methods to prepare students for the changing professional demands (Tavares et al., 2023).

Therefore, many studies show that—alongside language proficiency, cultural sensitivity and writing abilities—potential translators need solid grounds in technical training (Almugharbil, 2021). In this case, human translators take on the task of filling the cultural and contextual knowledge gap—which these technologies lack—so their services remain essential for improving AI-generated translations and creating language connections (Popel et al., 2020). Thus, AI software works alongside human translators through a relationship where AI tools handle the technical aspects, while human translators deal with other issues such as cultural sensitivity and ethical challenges that exceed AI capabilities. For these reasons, academics and administrators should work to establish that technology does not decrease translation quality or accuracy standards (Farhad et al., 2021). Instead, they are valuable assets for achieving more timely and reliable translations. They should also continue to discuss this issue extensively while debating the ethical implications of AI tools in translation. Therefore, more research on translation is needed to show the most effective methods for integrating AI tools into education programmes so that students could excel in technology-based translation careers.

Theorising About Technology Acceptance Model of the Study

The field of translation has undergone a major transformation because of the introduction of AI tools in language translation operations. Since its introduction by Davis in 1989 (Getchell et al., 2022), the Technology Acceptance Model (TAM) serves as an essential framework to study the acceptance of new technologies on both individual and organizational levels. It examines two essential components which determine the adoption of technology: (i) perceived usefulness and (ii) perceived ease of use. These two essential elements determine the extent of which AI tools are adopted by both professionals and students studying translation courses in their work.

AI tools users rate the technology as highly useful because of their belief that it will greatly boost their work quality. The translation community views AI tools as dependable assistants through machine translation (MT) systems and computer-assisted translation (CAT) software since these tools show promising potential to improve both the efficiency and speed of translation while enhancing its accuracy at the same time (Moneus & Sahari, 2024). Moreover, research shows that AI tools decrease both time and human labour required for translation work, especially when processing long or recurring content. Buitrago Ciro and Bowker (2020) report that when a group of professional translators used AI tools such as DeepL and Google Translate, they achieved better efficiency in processing large texts compared to those who did not. Despite their efficiency and accuracy in providing benefits for translation work, their use was limited in some translation assignments, especially when it comes to translating cultural expressions and idiomatic language (Shih, 2021), which led to questioning their accuracy by translators. As a result, their reliability became a point of concern when translating contextualised content, which resulted in limiting their adoption.

AI tools continue to advance with new innovations. Those who lack technology expertise or find AI tool interfaces challenging to use may struggle to incorporate these tools into their work processes. Therefore, it is reasonably expected of traditional translators who perform their work manually to feel uncertain about adopting AI tools in their work. For this reason, every effort should be made to facilitate their acceptance of using AI tools in translation. Achieving this objective requires extensive training combined with support to reach two essential goals: (a) simplifying AI tool usage, and (b) boosting the industry's acceptance of AI tools for its fast and accurate results.

III. Methodology

A. Research Design and Participants

In order to gather the data necessary for addressing the research questions of this study and achieving its objectives, a survey was used as the main instrument and was distributed to students studying translation courses at a Saudi university. Moreover, focus-group interviews were conducted with some of the participants in order to have deeper insights from the participants. The main goal of combining both qualitative and quantitative methods was to have a better understanding of the students' responses to both the qualitative and quantitative questions. The study includes two distinct groups of students studying translation courses; the first group of students were pursuing their bachelor's degrees whilst the other group were doing their master's degrees. The reason behind establishing these two groups is to achieve diverse academic perspectives. The total number of the research participants was 114.

B. Data Collection Tools

The research design combined surveys with semi-structured focus group discussions to achieve comprehensive understanding of the topic in discussion. The first step involved creating an online questionnaire to assess the students' experiences using AI tools for translation. The research examined the students' behaviour regarding AI tool usage, its frequency, their satisfaction level, and the effectiveness of these tools. The students evaluated their perceptions and practical experience through a five-point Likert scale. In order to analyse the data, this study employed SPSS software, which produces percentages and mean values for AI usage and user satisfaction and perceived usefulness.

TABLE 1
DEMOGRAPHIC INFORMATION OF THE PARTICIPANTS

		N	%
Gender	males	99	86.8%
	females	15	13.2%
Level of education	Bachelor	23	20.2%
	Master	91	79.8%

The survey distributed to students was accompanied by two focus-group interviews which aimed to deepen understanding of student perspectives regarding AI tool usage in translation. All participants received the chance to express their thoughts about the subject during the interviews. The interviews served to expand knowledge about student opinions regarding the benefits and drawbacks of AI tools used for translation work. In doing so, the participants were encouraged to give their insights freely. The discussions were recorded and transcribed to allow for further analysis and to draw more conclusive results from the survey responses. Combining qualitative and quantitative methods—through data analysis and interviews/discussions provided an opportunity for data triangulation.

Throughout the study, ethical considerations were of high priority as participants were well informed about the study objectives and were required to give their verbal consent before taking part in the discussion. They were also informed of their right to withdraw at any point of time during the study. Moreover, the participants were assigned numbers instead of using their real names in order to keep their real identities and information confidential.

C. Research Question

To address all of the points discussed earlier, this study poses the following research questions:

1. What is the Saudi EFL students' degree of acceptance of AI tools usage in translation?
2. What is the Saudi EFL students' level of utilization of the AI tools in translation?
3. What are the experiences and perceptions of the Saudi EFL students using AI tools in translation?

IV. RESULTS AND DISCUSSION

The study aims to present a clear and measurable picture of how university students studying translation courses are employing AI tools in their translation tasks. In doing so, mean scores were calculated, and statistical analysis was carried out to see if there was any relationship between the responses. Further, the qualitative data analysis that was driven from the focus-group interviews provided a better understanding of the students' personal experiences with AI tools in translation. The survey analysis was based on the percentages and the means values for each dimension, as shown in Table 2.

TABLE 2
THE USAGE OF AI

No.	Statement	Strongly disagreed	Disagree	Neutral	Agree	Strongly agree	Std. deviation	Mean
1	I only use AI to check the meaning of unfamiliar words.	6.1%	10.5%	10.5%	53.5%	19.3%	3.69	1.09
2	I use AI for translating long paragraphs.	9.6%	19.3%	11.4%	37.7%	21.9%	3.43	1.29
3	I use AI to translate essays from English into Arabic to help me understand its meaning.	14.0%	29.8%	18.4%	33.3%	4.4%	2.84	1.16
4	I use AI to translate essays, articles or papers from Arabic into English to submit them to the instructor.	14.0%	29.8%	23.7%	27.2%	5.3%	2.80	1.15
5	I do my homework and write my assignments in Arabic then translate them into English using AI.	8.8%	21.1%	15.8%	43.0%	11.4%	3.27	1.18
6	It is easy for me to read English texts, so I use AI.	10.5%	17.5%	21.1%	33.3%	17.5%	3.30	1.25
7	I find writing in English challenging, so I tend to use AI.	11.4%	28.9%	21.1%	27.2%	11.4%	2.98	1.22
8	I do not feel confident reading in English, so I ask AI for assistance.	1.8%	8.8%	22.8%	55.3%	11.4%	3.66	0.86

Table 2 shows that students utilise AI tools to support their translation, particularly in academic writing. The findings reflect both reliance on AI tools for specific language challenges and varying degrees of confidence in English proficiency. The highest mean score was found in the item "I only use AI to check the meaning of unfamiliar words" (3.69), suggesting that a large number of the students use AI tools for basic vocabulary assistance. Therefore, the students mainly use AI tools for vocabulary support and reading comprehension. This is particularly evident in the context of translation tasks, where students use AI tools for short-form translations and full essay translations. However, there is a level of reluctance or decreased confidence in AI tools for translating longer or more complex academic texts due to concerns over accuracy or authenticity. It was observed that the students often write assignments or papers in Arabic and translate them into English using AI. This means that while some students feel confident enough to engage with English texts, they still depend on AI tools for assistance. Perceived weakness in language skills and dependence on AI tools are also significant factors. The students use AI as an assistant tool rather than a complete solution, especially when it comes to the writing skill. The findings also show that while AI tools play a useful role in language learning for easier tasks such as translating words and paragraphs, students are careful of not to overly rely on it for more challenging tasks such academic writing and long texts translation. This finding suggests that there is a need for establishing a guidance on how to integrate AI tools effectively into language learning practices.

TABLE 3
USER SATISFACTION

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Std. deviation	Mean
1	AI is convenient for translating English into Arabic.	3.5%	13.2%	33.3%	42.1%	7.9%	3.38	0.93
2	AI is convenient for translating Arabic into English.	5.3%	21.9%	28.9%	36.0%	7.9%	3.19	1.04
3	AI is convenient for translating documents related to my field.	0.9%	7.9%	26.3%	48.2%	16.7%	3.72	0.87
4	The advantages of AI outnumber the disadvantages.	2.6%	0.9%	14.9%	57.0%	24.6%	4.00	0.82
5	AI saves time.	8.8%	24.6%	31.6%	31.6%	3.5%	2.96	1.03
6	AI's translation is acceptable in terms of the assignment that I deliver to my instructor.	0.0%	0.9%	5.3%	38.6%	55.3%	4.48	0.64
7	The translation produced by AI must be edited and proofread by English language professionals to amend the flaws of AI.	10.5%	19.3%	39.5%	27.2%	3.5%	2.94	1.02
8	I am satisfied with the outcome of the AI.	5.3%	16.7%	19.3%	44.7%	14.0%	3.46	1.09
9	I use AI to improve my English language by translating different types of texts.	1.8%	16.7%	37.7%	29.8%	14.0%	3.38	0.98

The students in the study exhibit positive attitudes toward AI tools because they find them useful for their educational tasks. Nevertheless, the students have some doubts about AI tools accuracy and the need for editing and general reliability. Item 6 from the survey received the highest mean score of 4.48 with a small standard deviation of 0.64 which shows strong agreement among the students. A large number of participants (88.6%) accept or strongly accept this statement. They probably feel this way because AI tools have become more effective during the past few years while students gain advantages from time efficiency and convenience. The item "The advantages of AI outnumber the disadvantages"

received a score of 4.00 from the respondents. The large proportion of the students who agree (57%) or strongly agree (24.6%) indicates broad approval of AI tools in language support roles, especially in terms of convenience and utility.

The academic use of AI tools received strong endorsement from the students because they felt confident about using these technologies for assignment submissions. The students have positive attitudes about the practical applications of AI tools and its advantages when dealing with subject-specific materials. They rate AI translation tools more positively when translating from English into Arabic while showing average satisfaction with the overall translation performance. The users recognise the accuracy constraints of AI tools as well as their performance limitations, which led to a moderate confidence in AI translation systems. Further, the students view AI tools as a language assistance system rather than just a translation tool because they use it to enhance their English skills. The research findings indicate that the students understand the advantages of AI systems, and yet keep a safe distance from its application in critical academic responsibilities. Therefore, language instruction programmes should integrate AI literacy education to help students effectively use these technological tools. The students generally have positive experiences with AI output which reaches a mean score of 3.46 while they utilise AI to enhance their English skills.

TABLE 4
PERCEIVED USEFULNESS

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Std. deviation	Mean
1	Learning how to use AI is simple for me.	1.8%	14.9%	28.9%	36.8%	17.5%	1.01	3.54
2	Logging in and out of AI is fast and simple.	3.5%	13.2%	21.1%	43.9%	18.4%	1.04	3.61
3	It is simple to handle materials using AI.	12.3%	30.7%	18.4%	28.9%	9.6%	1.22	2.93
4	Overall, I think that AI is simple to use.	15.8%	40.4%	22.8%	15.8%	5.3%	1.10	2.54

Table 4 shows the students' opinions on AI tools' usability and helpfulness for academic purposes. The student population expresses dual opinions about AI tools because they show ease with AI basics yet express substantial doubts about its usability and integration in their academic work. The statement 'Logging in and out of AI is fast and simple' achieved the highest mean rating of 3.61 indicating that the students find the technical process of accessing AI systems straightforward. The statement 'Learning to use AI is simple for me' obtained a mean score of 3.54 while more than half of the students agreed or strongly agreed with this idea. Student digital literacy appears strong since they demonstrate comfort in basic AI interface operation and navigation.

However, the students have also provided negative feedback about the practical effectiveness of AI tools during the study. The statement 'It is simple to handle materials using AI' received a low mean score of 2.93 along with standard deviations of 1.22 while 43% of students strongly disagreed or disagreed with this statement. The students demonstrate the capability to access AI tools yet experience difficulties in understanding and utilising the output content these systems produce. The substantial standard deviation shows that student experiences differ because of factors including language abilities and academic proficiency and the quality of AI-generated content. The lowest mean score belonged to the statement 'Overall, I think that AI is simple to use' with a rating of 2.54. The respondents indicated their lack of confidence regarding AI's comprehensive ease of use through their disagreement or strong disagreement with this statement (56.2%). Students maintained positive views toward specific tasks like logging in and learning AI usage, yet they face major obstacles when integrating AI into academic work. The separation between students and AI functionality could result from two factors: AI systems generating outputs that do not match academic requirements or the absence of effective educational guidance for AI tool implementation in educational environments.

TABLE 5
EFFECT OF GENDER ON THE DIMENSIONS

Gender		N	Mean	Std. Deviation	Sig
The use of AI	male	99	3.264	0.866	0.525
	female	15	3.133	0.706	
Satisfaction	male	99	3.527	0.513	0.062
	female	15	3.326	0.345	
Perceived usefulness	male	99	3.167	0.693	0.466
	female	15	3.067	0.448	

The analysis of male and female student responses on AI usage appears in Table 5 for actual AI use satisfaction levels and perceived usefulness. The analysis includes mean scores and standard deviations and significance (Sig.) values which show if gender affects the dimensions. Male students scored slightly higher than females on the use of AI with 3.264 compared to 3.133. The Sig. value was 0.525 which indicates that this difference is not statistically significant. The results show that gender does not strongly affect how students employ AI tools according to the gender variable.

The study assessed student satisfaction with AI tools and produced a moderate satisfaction rating which showed that males scored 3.527 compared to females with 3.326. The Sig. value showed low statistical significance at 0.062. The results indicate that males tend to be more satisfied with AI tools, yet this trend does not reach the conventional significance level. Male students demonstrated higher mean scores of 3.167 compared to females who scored 3.067 on the 'Perceived Usefulness of AI.' The Sig. value at 0.466 indicated no significant difference in how both genders viewed the usefulness of AI.

TABLE 6
EFFECT OF LEVEL OF EDUCATION ON THE THREE DIMENSIONS

Level of education		N	Mean	Std. Deviation	Sig
Use of AI	Bachelor	23	3.321	0.715	0.641
	Master	91	3.228	0.878	
Satisfaction	Bachelor	23	3.589	0.440	0.342
	Master	91	3.479	0.511	
Perceived usefulness	Bachelor	23	3.261	0.633	0.375
	Master	91	3.126	0.673	

Table 6 presents a summary of how participant education level influences the three dimensions. The difference between bachelor's and master's students was not significant as their mean scores of 3.321 and 3.228 showed a Sig. value exceeding 0.05. The data revealed bachelor's degree holders demonstrated higher satisfaction through their mean score of 3.589 whereas master's degree holders achieved a score of 3.479. The comparison between these two groups proved insignificant because the p-value reached 0.342 which exceeds the statistical significance threshold.

Students holding a bachelor's Degree reported higher perceptions of the usefulness of AI tools with a score of 3.261 whereas master's students achieved a lower score of 3.126. The Sig. value of 0.375 indicated no statistical difference between these two groups. The students mentioned during the analysis that AI tools achieve the best performance when processing simple literal sentences particularly for translating standard vocabulary and grammatical patterns. The student population demonstrates awareness about AI's basic translation capabilities which matches research findings about AI tools performing best with straightforward language inputs. Many students repeatedly pointed out that AI tools fail to understand context and experience difficulties with idiomatic expressions while producing unnatural or incorrect academic language. Multiple students emphasized that students should always revise their AI-generated output before submitting their work. The students whose assigned numbers are 1, 4, 6 stated that AI tools proved effective for generating fast translations when they had limited time available. Students 1, 2, 5 used AI translation analysis to discover new vocabulary and sentence structures. The two main issues students reported about AI tools involved their failure to detect subtleties and its habit of producing word-for-word translations. Students 1, 3, 4 expressed concerns that their heavy reliance on AI tools would negatively impact their translation work. The majority of participants treated AI tool as aiding factors which proved beneficial, yet they did not consider it as a substitute for dictionaries, teachers or human translators.

Multiple research studies reveal various student attitudes toward AI tools in translation work (Mahdy et al., 2020; Alsubhi, 2024). The study reveals comprehensive information about student perspectives regarding AI tools especially when used in academic translation and writing tasks. Students mainly apply AI tools for basic language functions to confirm unknown word meanings according to Litman (2024). The findings indicate that students prefer to utilise AI for vocabulary support rather than for writing advanced academic material. The results match Meroua and Noudjoud (2024) who observed that students use AI tools exclusively for vocabulary identification. Students' AI dependency emerges from their self-assessed English skills because they depend on AI tools for instant clarification of unknown vocabulary, which makes AI tools easily accessible in their views. EFL learners in general use MT tools to understand difficult words and phrases in real time according to Sujarwo (2020). Students perceive AI tools as assistants beyond dictionary functions, which enables them to comprehend academic text meanings according to Dziri and Hassani (2024). The participants utilised AI tools to translate both short passages and entire essays, which indicates their heavy dependence on these technologies as a language connection, yet having possible doubts about writing English at an academic level. The study by Kruk and Kałużna (2025) observed that students use AI tools to draft assignments or finalise them since they believe their language skills are insufficient. They employ AI tools to translate their native language text into English due to its ease of use and time efficiency although this practice diminishes their work's precision and writing style. Their careful treatment of the usage of AI tools for complex writing tasks demonstrates their realistic understanding of AI systems' current translation (in)capabilities in academic writing.

Moreover, the student responses indicate positive attitudes toward the usefulness of AI tools in their studies according to the research findings. They express strong confidence that AI tools will fulfil institutional requirements during times of urgency and when dealing with difficult linguistic work, but, at the same time, they maintain a negative view regarding the system's operational boundaries. In addition, the students find AI tools easy to use based on their perception and experience major difficulties when using AI-generated content in academic assignments, even though they find basic operations such as logging in and AI usage straightforward. The problems students encounter stem from poor language accuracy and weak structural organisation along with inadequate training about using AI tools effectively. Students who lack proper AI literacy education must handle tool constraints independently which results in academic frustration and inappropriate usage of the AI tools.

The main result from this study reveals no significant statistical differences in AI usage or satisfaction or perceived utility among students based on gender or educational background. All dimensions showed slightly higher scores from male students and bachelor's degree holders according to Jo (2022), while demographic factors failed to impact AI usage satisfaction or perceived utility.

The interview data shows that many students find AI tools helpful for translating simple or literal sentences as well as common vocabulary and grammatical structures. They express concerns about AI tools misinterpreting context as well as facing difficulties with idiomatic expressions, which may result in generating awkward or inaccurate academic

language. Students modify AI-generated content before submitting their work while simultaneously learning new words and sentence patterns from AI evaluations. Most students see AI tools as an additional resource which does not replace human instructors or dictionaries or translators.

These results demonstrate how students view AI tools as a helpful resource for their academic needs while they remain cognizant of its restrictions. The research supports educational institutions to establish AI literacy training programmes in language classes to enable students to understand the limitations of AI tools and to use them responsibly, while maintaining ethical practices to enhance their academic performance.

V. Conclusion

The research presents significant findings about a group of Saudi EFL translation students' perceptions as well as their practice of AI tools in academic work. The study demonstrates that students from advanced levels show positive AI adoption behaviours, yet many students remain concerned about maintaining their fundamental translation abilities and working with cultural content. The research findings have significant implications for educational programmes that involve translation courses operating in Saudi Arabia and other similar contexts. Educational institutions should establish formal training sessions that teach AI methods and help students analyse AI tools while teaching responsible machine translation practices.

VI. Recommendations and Suggestions for Future Studies

Several practical recommendations for translation education programmes emerge from the study's findings. First, academic institutions should develop dedicated AI training modules that systematically introduce students to machine translation tools while emphasising critical evaluation skills. Secondly, the modules should teach students how to use AI tools responsibly through technical training along with discussions of ethical considerations and post-editing techniques, which preserve their translation competencies. Moreover, the implementation of faculty development programmes should also teach instructors how to teach AI-based courses effectively and make them proficient in both pedagogical methods and technological tools. The partnership development between universities and translation industry professionals would also improve curriculum relevance through real-world AI tools knowledge sharing. Longitudinal research that follows students through their translation skill progression and their adoption of AI tools would generate essential data on long-term effects. Research comparing technology acceptance in translation education across different cultural and linguistic environments would reveal the effects of local elements on technological acceptance behaviours. More research is required to create standardised evaluation methods which analyse both the impact of AI tools on translation output quality and operational workflow effectiveness. The pedagogical implications of emerging tools such as generative AI and multimodal translation systems require continuous investigation because of the continues evolution of AI technology. The study of faculty member perspectives on curriculum adaptation challenges would be a good next step for furthering our understanding of institutional readiness for technological change.

The combination of recommendations and research directions demonstrates the necessity to implement the integration of AI tools through balanced critical engagement that leverages technology benefits while, at the same time, safeguarding the human decision-making process and cultural understanding needed for high-quality translation work. The research findings would help the field to create sophisticated approaches for training translation specialists who work in an AI-enhanced language services environment. Future studies should continue to study how technological tools boost human translation capabilities instead of replacing them while focusing on specialised domains that need cultural understanding and creative problem-solving skills.

VII. Limitations

This mixed-methods study provides comprehensive knowledge on the adoption of AI tools in translation among a group of university students studying translation courses. Yet, there are some research constraints and limitations that need to be addressed. First, the study employed only 10 participants to generate qualitative data. This number may not be sufficient for drawing more concrete conclusions of the participants' views on the discussed topic. Therefore, although the findings provide valuable insights, they do not represent, and therefore cannot be, applied to the wider student population. Secondly, self-reported data within the survey may have produced response biases. This limitation could be resolved in future research by diversifying the studied samples.

Finally, future studies should build upon these research findings to study how the use of AI tools impacts translation quality over time and to examine successful institutional approaches for the implementation of technology. It is hoped that this research could help to expand our knowledge on technological adoption in language learning and lays groundwork for developing flexible translation teaching programmes suitable for the AI age. This research also addresses both positive and negative aspects found in this study to enable educators in creating better programmes for teaching translation skills in an evolving professional environment, while maintaining essential human elements of linguistic and cultural mediation.

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