Utilization of AI Technology in Translation Among Arabic Language Students at PTKIN in North Sumatra

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Abstract	This study describes the use of Artificial Intelligence (AI) among Arabic language students at several Islamic State Higher Education Institutions (PTKIN) in North Sumatra. Although the use of AI as a tool to assist in translating Arabic texts offers significant benefits for students, its negative impacts cannot be entirely avoided. The study aims to examine in depth how Arabic language students at these PTKIN utilize AI applications in the Arabic translation process, the reasons behind their choice of applications, as well as the positive and negative impacts on their motivation and learning outcomes. This research employs a qualitative methodology with a phenomenological approach. Data were collected through in-depth interviews, direct observation, and documentation. The research population consists of 331 Arabic language students distributed across four study programs at three PTKIN in North Sumatra. A purposive sampling technique was used to select 24 students as the research sample from these programs. The collected data were analyzed using descriptive analysis techniques. The findings indicate that the majority of Arabic language students are now actively using translation applications to support their coursework and thesis writing. The most frequently used translation applications include Google Translate, DeepL, and ChatGPT. The use of AI greatly assists students in simplifying the translation of their assignments and improving their learning outcomes. However, on the negative side, the translation skills of many students have not improved, as reliance on AI has led to laziness, dependency, and a lack of critical thinking.
Keywords	AI Technology; Arabic Language; Translation.

INTRODUCTION

The rapid development of digital technology over the past two decades has brought significant transformation across various sectors of life, including higher education. One of the most prominent technological advancements is Artificial Intelligence (AI), which has increasingly permeated learning practices and students' academic work. AI technologies such as Google Translate and ChatGPT have become essential tools for students in comprehending and translating texts, particularly in the context of foreign language learning (Cambridge University Press, 2023). In the context of Arabic language education in Indonesia, especially within State Islamic Higher Education Institutions (PTKIN), the use of AI-based applications has become increasingly widespread. Students from both the Arabic Language Education program and the Arabic Language and Literature program frequently utilize machine translation technologies to complete coursework and even undergraduate theses. These technologies offer convenience and efficiency, particularly in accessing lexical equivalents and sentence structures instantly tasks that previously required considerable time and manual effort (Nurhayati, 2021), (Al-Hamdani, 2022).

However, the convenience provided by AI does not always correlate with improvements in students' language competencies. Several studies suggest that excessive reliance on translation technologies may hinder the development of advanced linguistic skills, as students tend to bypass the critical thinking processes necessary to comprehend both source and target texts (Lee, 2020). This phenomenon is also known as "second-language avoidance," wherein students complete translation assignments without actively engaging with the target language, interacting instead only with the source text and the translation machine (Kussmaul, 1995). Therefore, it is essential to examine more comprehensively the extent to which the use of AI technology in the translation process contributes to the learning experiences of Arabic language students, as well as its impact on their learning outcomes and overall translation abilities. This study focuses on analyzing the use of AI among Arabic language students at several PTKIN institutions in North Sumatra, with the aim of understanding both the benefits and the risks associated with this phenomenon.

Several previous studies have been conducted on similar topics, although with variations in context and methodological approaches. The following examples are particularly relevant to the present research: (1) "Integrating Artificial Intelligence (AI) as an Assistive Tool in Arabic–Indonesian Translation," which examines the use of AI as a support tool in translating Arabic texts into Indonesian, with an emphasis on the integration of technology into the translation process

(Hizam et al., 2025); (2) "The Role of Artificial Intelligence (AI) in Arabic Language Learning Among Postgraduate Students at UIN Maulana Malik Ibrahim Malang," a study that explores the function of AI in Arabic language learning at the postgraduate level, including its application in translation and text comprehension (Evy Nur Rohmawaty et al., 2024); (3) "A Comparison Between Google Translate and Artificial Intelligence in Translating from Arabic to Indonesian," which analyzes the translation quality produced by Google Translate and other AI-based tools within the context of Arabic–Indonesian translation (Nabila Putri, 2024); (4) "The Role of Technology in Arabic-Indonesia Translation: Transformation of Education in the Digital Era", This study examines the role of technology in Arabic Indonesian translation, focusing on the opportunities and challenges it poses (Tri et al., 2025) (5) "Students Perception of Translation Software : A Case Study in the Bachelor and Master Programs of Arabic Education", a study aimed at investigating the perceptions of undergraduate and graduate students of Arabic Language Education regarding the use of translation software in higher education (Uqba et al., 2024).

Although these prior studies address themes related to AI and translation, each differs in its specific focus and scope compared to the present study. The first study is a literature-based research that focuses on analyzing AI-generated and professional translations, which are then described. In contrast, the present study is a field research investigation into the contribution of AI use in translating Arabic texts and its implications for students' motivation and learning outcomes. The second study discusses the use of various AI tools in the general process of Arabic language learning among postgraduate students, while the present study specifically examines the use of AI for Arabic translation only. The third study aims to compare the quality of Arabic text translations produced by artificial intelligence technology with those generated by Google Translate. In contrast, the present study examines the broader use of AI among Arabic Education students at Islamic Higher Education Institutions (PTKIN) in North Sumatra. The fourth study is a library research project in which data were collected through a literature review, whereas the present study is a field research project that collects data through in-depth interviews, observation, and documentation. The fifth study examines students' perceptions of the use of translation software in general, encompassing several AI programs and electronic Arabic dictionaries, whereas the present study focuses solely on the use of AI. In addition, the data in that study consist of a combination of qualitative and quantitative data, while the present study is purely qualitative.

Based on the baground above, the study aims to examine in depth how AI applications are used by Arabic language students at these PTKIN in the Arabic translation process, the reasons behind their choice of applications, and the positive and negative impacts on their motivation and learning outcomes.

METHOD

This study employs a qualitative descriptive approach in its field research. This approach was chosen to gain an in-depth understanding of the phenomenon of using Artificial Intelligence (AI) technology in the translation processes carried out by students of Arabic Language Study Programs at several PTKIN institutions in North Sumatra. According to Creswell, the qualitative approach is appropriate for examining the meanings, experiences, and perspectives of participants regarding a particular social phenomenon (Creswell, 2014).

The research was conducted at three PTKIN institutions in North Sumatra, namely UIN Sumatera Utara Medan, UIN Padangsidimpuan, and STAIN Mandailing Natal. The research subjects consisted of students from the Arabic Language Education program and the Arabic Language and Literature program, specifically those in semesters 5 to 8 who actively used AI technologies such as Google Translate, ChatGPT, and DeepL in their translation processes for academic assignments and thesis writing. The total number of Arabic language students who served as the research population was 331. From this population, a sample of 24 students was selected, distributed across four Arabic language study programs (Arabic Language Education and Arabic Language and Literature) from three Islamic State Higher Education Institutions (PTKIN) in North Sumatra. The sampling technique used in this study was purposive sampling, which involves selecting informants who are considered to have the most relevant knowledge regarding the research topic. The selection of 24 student participants was not based on a specific percentage, as qualitative research prioritizes the depth of information over the number of respondents (Creswell, 2014). The study was conducted over approximately one academic year, encompassing both the odd and even semesters of the 2024/2025 academic year. Purposive sampling was employed because the researcher intended to focus on informants who were directly relevant to the research objectives, as suggested by (Sugiyono, 2017).

The data sources in this study consist of two types: primary data and secondary data. The primary data were collected through in-depth interviews with 24 students from the Arabic

Language Study Program who were selected using purposive sampling, namely individuals considered to have the knowledge, experience, and ability to provide detailed explanations regarding the use of AI in Arabic translation. The interviews explored various perspectives, experiences, as well as the positive and negative impacts of using AI in the Arabic translation process on their motivation and learning outcomes. In addition, direct observations were also conducted on Arabic language learning activities and the use of AI in the classroom. Secondary data were obtained through documentation, such as student assignments and theses that were translated using AI, as well as various journal articles relevant to this topic. Data were collected through three primary techniques: (1) in-depth interviews with selected students using purposive sampling, (2) participatory observation of the translation processes in classroom assignments as well as thesis-related work, and (3) documentation analysis of students' translated texts produced with the assistance of AI tools.

The main instrument in this study was the researcher (human instrument), supported by interview guidelines and observation sheets. All data were recorded, transcribed, and coded for analysis. Data analysis was conducted interactively and continuously, beginning with data collection, followed by data reduction, data display, and conclusion drawing (Miles, M. B., Huberman, A. M., & Saldaña, 2014). Data validity was ensured through source triangulation and technique triangulation.

FINDINGS AND DISCUSSION

Findings

The findings of this research, conducted across several PTKIN institutions in North Sumatra, reveal that the majority of students in the Arabic Language Education and Arabic Language and Literature programs actively use AI to translate sentences, conversations, and various forms of texts from Arabic into Indonesian and vice versa. Only a small number of students continue to prioritise electronic dictionaries, whether online or offline, largely due to concerns regarding the accuracy of AI-generated translations and a desire to strengthen their own translation abilities. Students in both Arabic Language study programs utilise various AI-based translation applications across multiple academic tasks, including searching for vocabulary, translating dialogues, texts, listening materials, and other Arabic-language coursework. These tasks range from class assignments and essay writing to research proposals, journal articles, and undergraduate thesis manuscripts that require

translation.

Several AI-based applications have been used by Arabic Language students at PTKIN institutions in North Sumatra, including Google Translate, DeepL, iTranslator, Gemini, Duolingo, Bing Translator, Microsoft Translator, Memrise, Yandex Translate, and ChatGPT. Among these, the most frequently used translation tools are Google Translate, DeepL, and ChatGPT. Google Translate is an AI-based translation tool that has been used by nearly all students in the Arabic Language Education and Arabic Language and Literature programs across the surveyed PTKIN institutions. Every respondent in this study reported having used Google Translate for translation tasks due to its practicality and ease of access.

However, many students have shifted to other applications such as DeepL, as it is perceived to provide more accurate translations than Google Translate. The most widely used tool at present is ChatGPT, which many Arabic Language students consider more practical and effective because it offers interactive and varied translation outputs. Each AI application is selected based on its perceived advantages in assisting students in translating Arabic texts into Indonesian or vice versa. Google Translate is the first practical translation tool introduced to Arabic students in PTKIN at North Sumatra. The reason for using this program because it is simple, easily accessible, and convenient to use. Google Translate allows students to translate not only text, but also voice, images, and documents from one language to another. Some students often use it only by capturing the text, then translating it with Google Translate or reading the translation of the text in the image. Moreover, Google Translate does not require users to log in before accessing its features.

Some of the Arabic students in PTKIN at North Sumatra choose DeepL as a translation tool because they feel that DeepL's Arabic translation is more accurate, acceptable, highly readable, and easy to understand, with consistency in sentence structure and better sentence structure and language style compared to other translation applications. They know it from the positive responses of lecturers to the results of Arabic assignments, which they have translated using this application. However, DeepL also has limitations, including difficulties in translating culturally specific terms and errors in understanding contextual meaning. The preference for ChatGPT, on the other hand, stems from its distinctive interactive style and its capability to generate various types of translations as requested by users, not limited to a single translation style. For many Arabic Language students, ChatGPT is considered more reliable for translating Arabic texts. Its language output is perceived as more comprehensible. ChatGPT offers greater flexibility through two-way interaction, enabling

users to direct and adjust the translation according to their contextual needs. Translated sentences can be tailored to specific requirements, such as formal or informal language, academic or literary style, and specialized terminology, depending on the subject matter. ChatGPT can also offer multiple translation alternatives, provided that users give clear and well-structured guidance to obtain the desired translation model.

Overall, the three AI tools mentioned above have significantly facilitated the learning process and improved the learning outcomes of Arabic language students at Islamic Higher Education Institutions (PTKIN) in North Sumatra, particularly in translating texts or sentences from Arabic into Indonesian and vice versa. AI-based translation tools are highly practical and user-friendly. They can translate texts within seconds, allowing students to obtain translations instantly without needing to spend excessive time consulting dictionaries. This enables students to save time and immediately access complete translated texts.

Findings from several Islamic Higher Education Institutions (PTKIN) in North Sumatra indicate that the use of AI as a translation aid has yielded both positive and negative impacts directly experienced by Arabic language students. Most students reported that AI greatly assisted them in understanding Arabic course materials and in translating their assignments and theses. AI simplifies the learning process, facilitates vocabulary interpretation and comprehension of Arabic texts, accelerates task completion without undue cognitive load, enriches vocabulary, helps students recognize Arabic grammatical rules and sentence patterns, saves time compared to using traditional dictionaries, offers multiple stylistic translation options across different AI platforms, and enhances student productivity—particularly for those who struggle with language proficiency. Thus, AI applications enable students to translate more easily; however, their outputs must still be edited and revised, as AI should be viewed only as an assistive tool rather than a perfect substitute.

In addition to the many positive impacts experienced by students with the presence of AI as a translation tool, several negative effects were also noted. Some students realized that the use of AI does not necessarily improve their actual Arabic competence or translation ability, as many tend to rely heavily on AI and become dependent on these tools. Students are increasingly reluctant to consult dictionaries when translating or attempting to understand Arabic texts, and some do not even review the AI-generated translations, instead accepting them uncritically as correct.

The negative impacts experienced by Arabic language students at several PTKIN campuses in North Sumatra regarding the use of AI as a translation tool include the following: a high level of

dependency on AI or machine translation (MT); reluctance to review or verify the accuracy of AI-generated translations; habitual reliance on instant results without engaging in analytical processes; decreased motivation to read or looking for in dictionaries; reduced cognitive activity due to overdependence on AI; diminished independence; lack of confidence in one's own abilities; limited effort to formulate personal interpretations; underutilization of cognitive skills; insufficient development of memory and analytical thinking; and reduced motivation to learn proper translation techniques because the process is perceived as overly convenient. The tendency toward instant solutions also discourages students from valuing the learning process itself. Additionally, students struggle to acquire and internalize new vocabulary because they only see the final translation outputs. Excessive trust in AI leads them to assume that all AI-generated translations are correct. Reliance on AI also diminishes their willingness to translate even simple sentences independently and weakens their motivation to study Arabic in depth—particularly its grammatical foundations—because they believe the tool can easily compensate for their lack of knowledge. Furthermore, habitual use of translation applications without critical evaluation can gradually erode students' logical and systematic thinking skills.

Discussion

The rapid advancement of technology has driven significant transformation in the field of education. One notable innovation that has gained increasing prominence is the use of Artificial Intelligence (AI) in learning activities. AI technology offers various conveniences and opportunities to enhance the effectiveness of learning processes, including in the teaching and learning of Arabic (Muthohharoh et al., 2024). Artificial Intelligence is a future-oriented technology designed to substantially simplify human life. This field has developed rapidly and holds the potential to reshape nearly every aspect of social interaction (Akinwalere & Ivanov, 2022), including communication and the translation of foreign languages encountered in academic and daily contexts. The integration of AI in translation has progressed significantly, resulting in a substantial impact on how individuals interact with foreign languages. This technology—which includes tools such as Google Translate, DeepL, ChatGPT, and other applications—offers speed, convenience, and efficiency far beyond what can be achieved through manual human translation (Charles-Kenechi, 2024).

Google Translate is the first practical translation tool introduced to students. It is simple, easily accessible, and convenient to use. As a free translation service provided by Google, it allows

users to translate text, voice, images, and documents from one language to another. One of its strengths is its accessibility across various platforms, including Android, iOS, and the web (admfip, 2024). Moreover, Google Translate does not require users to log in before accessing its features. It offers a wide range of services with user-friendly access and advanced features (CNBC Indonesia, 2022), enabling not only text translation but also voice and image translation (Google translate help, 2025a). In addition to online functionality, Google Translate also offers offline translation by allowing users to download specific languages so that translations can still be performed without an internet connection (Google translate help, 2025b). The Android version includes an offline mode that supports around 60 languages, which is considered one of its key advantages (Santoso, 2013).

Numerous studies indicate that DeepL is a highly effective AI-based translation application, particularly in constructing sentences and adapting contextual meaning in various European languages. DeepL is capable of translating texts with high accuracy, and according to several comparative studies, it tends to produce fewer grammatical errors than other services such as Google Translate when applied to specific corpora (Deng & Fan, 2025). DeepL's emphasis on quality and accuracy—rather than on the breadth of language coverage—makes it a more reliable translation tool. Its advanced neural machine translation technology, supported by extensive data, enables DeepL to recognize linguistic nuances and generate contextually accurate translations (Telaumbanua et al., 2024).

Regarding the Arabic language, several studies have shown that DeepL performs well in translating Arabic-to-Indonesian or Arabic-to-English texts in certain aspects. DeepL's translations are often evaluated as accurate, acceptable, and highly readable. Additionally, the tool is found to possess three main strengths: high translation quality, stylistic appropriateness, and consistency in sentence structure. However, DeepL also has limitations, including difficulties in translating culturally specific terms and errors in understanding contextual meaning. Thus, it is evident that DeepL translations are sometimes superior to those of human experts, especially in terms of stylistic coherence and structural consistency. Nevertheless, human translators may outperform DeepL when dealing with culturally embedded terms and deeper contextual interpretation (Ghazi & Ghifari, 2025).

However, in several studies, DeepL is considered superior to other machine translation systems in handling context, idiomatic expressions, and natural word choice (sentence composition and contextual adjustment). These findings are based on both human evaluation and automated

metrics (Kamaluddin et al., 2024). Machine translation quality assessment methods based on semantic similarity measurements have been employed to evaluate DeepL's translation quality and compare it with that of other translators. One study reported that DeepL achieved a high level of performance in terms of accuracy, fluency, and naturalness, scoring 94.13 out of 100 (Li, 2024). In several comparative studies, DeepL also produced fewer grammatical errors and required less post-editing compared to Google Translate (Deng & Fan, 2025). DeepL additionally offers a range of products, including DeepL Agent, DeepL Write, DeepL Voice, DeepL API, and DeepL Integration, which users can select based on their needs (*DeepL Translate: The World's Most Accurate Translator*, n.d.).

The findings of this study align with previous research indicating that the use of prompt engineering directing and refining instructions given to ChatGPT—enables the model to produce "flexible" translations suited to contextual conditions such as juncture and audience (Yamada, 2023). As a result, the translated text can be adjusted to meet specific needs: whether formal or informal language, academic or literary style, or specialized terminology aligned with the field discussed in the source text. This demonstrates that ChatGPT's translation capabilities can be guided to produce stylistic variations according to user requirements.

Other studies have compared the performance of ChatGPT and Google Translate in translating educational and medical documents. The findings indicate that ChatGPT produces fewer errors across various types of translation tasks (Rao et al., 2024), suggesting a potential advantage over other automatic translation tools. A professional translator has also highlighted the flexibility of ChatGPT in generating multiple translation variations, while noting that it still requires clear and well-structured linguistic guidance to produce optimal results (Shi et al., 2024). ChatGPT has also been employed in different stylistic contexts, including the translation of literary film scripts that do not rely on academic language but instead demand a more expressive literary style (Koh, 2023). Moreover, a comparative study involving Google Translate, DeepL, and ChatGPT in translating tourism texts showed that ChatGPT outperformed the other two systems across all evaluation dimensions, particularly when culturally tailored prompts were used (Chen & Lin, 2025).

Similar findings demonstrate that both ChatGPT and DeepL exhibit advanced linguistic capabilities in handling implicit subjects. Both models can adapt sentence structures flexibly, either maintaining the implicit nature of the subject or making it explicit when necessary. However, ChatGPT shows superior accuracy in interpreting implicit subjects, reflecting its stronger contextual

understanding. Its translations also tend to be more concise, nuanced, and readable, achieving higher accuracy than DeepL when translating literary texts (Sun, 2024). Nevertheless, ChatGPT occasionally introduces semantic shifts, indicating a trade-off between literal accuracy and rhetorical adaptation (Chen & Lin, 2025). The use of artificial intelligence (AI) in Arabic translation has become increasingly widespread due to its practicality and efficiency, making it an important productivity tool for students (Thi et al., 2025). These AI-powered programs assist students in better understanding Arabic texts and provide relatively accurate translations into other languages (Yusuf, 2024).

Machine Translation (MT) systems are highly efficient, capable of producing translations within seconds, thereby saving time (Uqba et al., 2024) and enabling students to complete their academic tasks more quickly (History, 2024). Users can instantly obtain translation results without having to manually analyze meanings or consult dictionaries (Li, 2024). One of the reasons AI/MT is used as part of digital education transformation is its ability to save time and provide easy access (Tri et al., 2025). In addition to accelerating task completion and serving as a practical tool for academic activities, AI can also expand and enrich students' vocabulary (Delyana, n.d.). The advantages of AI in terms of language coverage, adaptability, and improved translation quality can positively affect user productivity (Yuxiu, 2024). Moreover, AI can assist in analyzing grammatical structures, including those in Arabic (Siyam et al., 2024).

However, AI translation systems still have notable limitations, such as challenges in capturing nuanced meanings and contextual subtleties, which require careful attention and cautious use (Siyam et al., 2024), (Budiarti et al., 2024). Variations and inconsistencies in translation quality are also frequently observed (Dinata et al., 2024). Nonetheless, AI can be recommended as a translation aid when used judiciously (Budiarti et al., 2024). About the positive impacts directly experienced by Arabic language students, research has shown that students utilize translation tools such as Google Translate and DeepL to accelerate task completion and to understand Arabic texts instantly (Uqba et al., 2024), (Alkhofi, 2024). Other studies also confirm that AI-based translation systems are capable of producing reasonably accurate translations while simultaneously saving users' time in academic activities, although post-editing is still required (Siyam et al., 2024), (Alamri, 2023). Thus, the integration of AI in Arabic translation contributes substantially to students' learning efficiency and academic productivity.

When comparing English-Arabic translations produced by AI with those produced by students, modern machine translation systems are able to generate outputs rapidly and, in some cases, achieve a quality level comparable to student-generated translations, making them useful as tools for expediting academic work (Alkhofi, 2025). Studies on students' perceptions of AI further indicate that they employ AI to complete assignments more quickly and as a practical aid when studying or drafting texts (Alkhofi, 2024). This time-saving advantage underscores practicality and speed as dominant reasons for its frequent use (Alamri, 2023). AI can generate translations within seconds, facilitating academic work processes, although human post-editing remains essential (Sun, 2024). Machine translation is used not only to accelerate translation tasks but also to support the drafting of academic documents (Uqba et al., 2024). Although some applications are regarded as flexible and practical tools for translating Arabic, AI-generated translations still require human verification to ensure quality, contextual accuracy, and ethical correctness. For example, studies in the translation profession note that while AI offers certain advantages, numerous limitations and risks of errors remain (Shi et al., 2024).

The findings of this study are consistent with several previous research reports, which indicate that students feel supported by the use of translation software in completing assignments quickly and easily, facilitating text comprehension and grammar checking. These tools contribute to students' learning processes and task completion (Uqba et al., 2024), and in some contexts, they enhance classroom participation (Taqiyya et al., 2024). Time efficiency is cited as the primary reason students rely on AI for text translation (Budiarti et al., 2024). Improvements in translation quality and student performance were also observed in a classroom action research study. AI has further been shown to enhance vocabulary acquisition, writing quality, and post-editing practices (Alkhofi, 2025). In addition, AI can promote language awareness and increase student engagement and comprehension when integrated into well-designed learning activities (Bakker, 2022).

Students' learning motivation also increases because they no longer feel intimidated by Arabic texts and do not struggle as much when translating into Arabic. This aligns with the explanation provided by Xinyang Peng and colleagues, who noted that AI/MT reduces students' cognitive load during translation tasks, thereby decreaseng their mental burden (Peng et al., 2024). Beyond reducing cognitive pressure, AI is highly practical for supporting independent study; thus, students who use it conscientiously for further learning can experience noticeable improvement in their translation skills (Alamri, 2023). Prior studies also demonstrate similar trends, showing that

students regard AI as a highly useful tool that assists their academic work (Wang, 2024). Previous research findings likewise indicate that the majority of 2023 Arabic Language Education students at UPI agreed that AI provides significant support in overcoming language barriers, facilitating vocabulary acquisition, and improving their comprehension of course materials (Taqiyya et al., 2024). Google Translate, as one AI-powered tool, can also assist students in understanding Arabic texts because its performance in translating from Arabic into other languages is generally better than its performance translating from other languages into Arabic (Bakker, 2022).

Nevertheless, a minority of students reported that AI has not contributed substantially to improving their comprehension of learning materials. This is due to the limitations in translation accuracy, leading many students to believe that dictionaries are more reliable for obtaining precise and dependable translations (Taqiyya et al., 2024). This aligns with Barbara Bakker's study at a Swedish university, which examined the use of Google Translate among students enrolled in an Arabic language course. The findings revealed that AI tools frequently fail to recognize gender distinctions and often generate grammatical errors in Arabic sentence structures (Bakker, 2022).

About the negative impacts directly experienced by Arabic language students, the results of this study are consistent with previous research. A study conducted among undergraduate and graduate students of the Arabic Language Education Department at UIN Maulana Malik Ibrahim Malang found that a major negative impact of AI use in translation is students' dependency on AI/MT, which leads to reduced motivation to translate manually (Uqba et al., 2024). This dependency not only hinders the development of translation skills (Dinata et al., 2024) but also weakens the mastery of skills they had already acquired (Siyam et al., 2024). The use of AI without appropriate pedagogical guidance can undermine the learning process (Bakker, 2022) because such dependency eliminates the effort involved in manual translation, which is the true foundation of learning. Therefore, instructional strategies are needed to ensure that AI functions only as a supplementary tool without compromising the development of core skills (Alkhofi, 2025). AI must be integrated purposefully into the curriculum so that it supports-rather than replaces-active learning processes (Alkhofi, 2024), and its use remains properly guided .

In principle, the use of AI as a translation aid is highly beneficial. However, several important considerations must be taken into account. The primary purpose of employing AI-based translation tools is to accelerate the translation process so that users do not need to consult dictionaries manually. Nevertheless, the output produced by AI must be carefully reviewed on a sentence-by-

sentence basis, as such systems still frequently generate errors. Post-editing is therefore essential to ensure that the translation accurately conveys the intended meaning of the source text (Dinata et al., 2024). Indeed, one study has noted that machine translation combined with post-editing can yield translation quality comparable to human translation, while being more efficient and cost-effective (Sebo & De Lucia, 2024). Furthermore, the text provided as input to AI-based applications must be written using grammatically correct and standardized language in order to minimize translation errors. Complex syntactic structures, non-standard or poorly formulated input, ambiguous wording, and problematic negation structures are among the factors that can reduce the quality of AI-generated translations (Lee, 2020).

CONCLUSION

Most Arabic language students at several PTKIN institutions in North Sumatra actively use AI-based tools to translate coursework and complete their undergraduate theses, with only a small number still prioritizing electronic dictionaries—either online or offline—for Arabic translation. The AI translation applications most commonly used by these students include Google Translate, DeepL, and ChatGPT. The rapid development of AI technology has produced both positive and negative impacts on students. On the one hand, AI greatly facilitates the translation process, enabling students to translate sentences or texts quickly and efficiently, which helps them complete academic tasks on time. On the other hand, excessive reliance on AI has led many students to become dependent on these tools, resulting in decreased motivation to improve their own translation abilities. Such dependency causes their translation competence to stagnate, which is detrimental to their overall language development.

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