Research Article | Araştırma Makalesi

Impact of Artificial Intelligence on Translation Education: Benefits of Artificial Intelligence and Challenges Faced by Students

Yapay Zekânın Çeviri Eğitimine Etkisi: Yapay Zekânın Faydaları ve Öğrencilerin Karşılaştığı Zorluklar

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Abstract

This study, using a qualitative research design, examined the impact of artificial intelligence (AI) on students of translation education. The data in the study were collected from 40 Turkish university students in the Department of Translation and Interpreting. In the study, the in-depth interview method was used to obtain the data related to the views and reflections of the students on the use of AI in translation activities. The findings of the study showed that AI technology provided positive contributions to the students in the translator training process. However, the findings of the study also revealed that AI technology exerted a negative impact on the students. Considering the negative impact of AI, the study highlighted the importance of AI as a learning tool as it provides a personalized learning setting and therefore its integration into translation education, the emergence of AI addiction over time due to frequent use of AI, and the retroactive interference effect of AI on learning due to frequent use. From this aspect, this study attempted to shed light on a better understanding of AI technology and its impact on the students in translation classes.

Öz

Bu çalışma, nitel bir araştırma desenini kullanarak, yapay zekânın (YZ) çeviri eğitimi alan öğrenciler üzerindeki etkisini incelemiştir. Araştırmanın verileri, Mütercim Tercümanlık Bölümü'nde okuyan 40 Türk üniversite öğrencisinden toplanmıştır. Çalışmada, öğrencilerin çeviri faaliyetlerinde YZ kullanımına ilişkin görüş ve düşünceleri ile ilgili verileri elde etmek için derinlemesine görüşme yöntemi kullanılmıştır. Çalışmanın bulguları, YZ teknolojisinin çevirmen eğitimi sürecinde öğrencilere olumlu katkılar sağladığını göstermiştir. Ancak çalışmanın bulguları, YZ teknolojisinin öğrenciler üzerinde olumsuz bir etkisinin olduğunu da ortaya koymuştur. YZ'nin bu olumsuz etkisi göz önüne alındığında ise; bu çalışma, bireyselleştirilmiş bir öğrenme ortamı sağladığı için YZ'nin bir öğrenme aracı olarak önemini ve bu nedenle çeviri eğitimine entegrasyonunu, YZ'nin sık kullanımı nedeniyle zaman içinde YZ bağımlılığının ortaya çıkmasını ve yine sık kullanıma bağlı olarak YZ'nin öğrenmede geriye ket vurma etkisini vurgulamıştır. Bu yönüyle bu çalışma, YZ teknolojisinin daha iyi anlaşılmasına ve çeviri derslerinde öğrenciler üzerindeki etkisine ışık tutmaya çalışmıştır.

INTRODUCTION

With the development of technology, people have entered a digital world, especially after the Covid 19 pandemic, which had a significant impact on all areas of education. At this point, the pandemic disease made online or distance learning inevitable, so the lockdown due to the pandemic made students spend more time on computers. In addition, every student now has a smartphone and uses the internet in both social and educational settings. Because of this, the internet has become an indispensable part of every student's life. In addition, technology companies are creating new programs or updating existing ones to meet people's needs and expand their markets. Today, the impact of such programs on students is undeniable, and artificial intelligence-based programs are one of them. As a result of the above-mentioned developments, it has become imperative to examine the impact of technology on education and, therefore, Artificial Intelligence (AI), which is a recent technological development, and its effects on students must be discussed in a broad spectrum to shed light on the pedagogical implications in education and to make it an effective learning tool.

AI is a branch of computer science that develops systems that simulate human intelligence. This technology is based on algorithms and programs that exhibit cognitive abilities associated with human behaviors such as information processing, problem-solving, learning, and natural language processing (Nilsson, 1980). The fundamental principles of AI involve learning from large data sets, where systems use algorithms to detect patterns in the data and then use these patterns to predict future outcomes (Yu & Kumbier, 2018). This process is conducted through human-machine collaboration, where humans play a critical role in every stage, from data collection to algorithm development. To enhance AI efficiency, statistical methods are applied, and stability is essential for ensuring that algorithms generate reproducible and interpretable results (Zeng et al., 2019).

In today's world, AI is a technological revolution that is always open to renewal and evolution. At this point, scrutinizing AI and its impact is crucial because AI can be defined as "an interdisciplinary subject that involves information, logic, cognition, thinking, systems, and biology. It has been used for knowledge processing, pattern recognition, machine learning, and natural language processing" (Zhang & Lu, 2021, p. 7). As it affects a vast area, the impact of this technological revolution needs to be scrutinized in a wide spectrum. One of these areas is translation. In the globalized context, translation through computer programs has the utmost popularity. In this field, the evolution of AI (also known as machine translation) has reached a top point as it is beneficial to meet the needs of the translation market. Here, we can assume that machine translation is better than human translation. However, the findings of the studies carried out in the research context do not support such a bias. In this regard, as well as its benefits, AI has some significant deficiencies when compared to human translation; especially in simultaneous translation, it is insufficient in terms of punctuation, emphasis, omission (what needs to be translated or what needs not to be translated), speed between speech and translation, and the synchronization of the body language with translation (Wang et al., 2022). Likewise, when legal text translation is considered, AI translation is faster and more effective than human translation; however, while human translation is better at conveying the nuances of culture-specific concepts and subtleties of translation between the source and target texts, AI translation is not sufficient while transferring the contextual meaning of the source text, cultural nuances, and, in some cases, idiomatic expressions between the two texts (Moneus & Sahari, 2024). In the field of news translation, despite providing an efficient translation, AI is lacking in some ways, especially in terms of producing an accurate translation, understanding cultural references and contextual meaning, and providing privacy and security (Lin, 2024).

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In addition to the deficiencies mentioned above, in the context of translation education embedded with AI technology, "the main challenge we face relates to the integration of machine learning into translator training" (Kenny, 2020, p. 14). In addition, instructors and students have inadequate knowledge about and experience in AI translation (He, 2021). Hence, students in translation education need to be supported by a well-designed AI training program that provides self-learning (Liu & Afzaal, 2021). From this aspect, instructors tend to adapt to new technological revolutions, pair technology with the teaching and learning process, determine effective methods, and discuss all aspects of AI technology to promote the quality of translation education (Kong, 2022). On this basis, as AI affects the quality of translation teaching in a positive direction (Yuxiu, 2024), the translator training process at universities must be designed in such a way that learners can find opportunities to prepare themselves for professional life (Wang, 2023). To create an effective milieu for students in translation education, an ongoing and sustainable teaching and learning process based on technology is required. In this regard, one of the translation competencies that translator students are required to have in this technological era is the acquisition of *instrumental competence* involving the knowledge of terminology, the ability to use computer tools, information technology software, and machine translation systems (Ramos, 2024).

In conclusion, in line with the information obtained from the above literature review, it can be understood that the use of AI in the translation training process is based on a triangle involving three basic competences: a) linguistic competence, b) translation competence, and c) technological competence. As all these three factors affect the translator training process, raising an awareness toward the proper and conscious use of AI may enhance the students' translation competence in this field. Achieving this requires getting a second opinion; namely, it requires scrutinizing AI use in translation from the viewpoint of the students receiving translation education.

Statement of the Problem

As mentioned before, AI is a branch of computer science, and it is at the utmost level in the technological development of machine translation. Although technology has taken a long path in the development of machine translation, it still has some specific shortcomings. First, as the basic function of machine translation is to translate the text literally, it needs post-editing and some specific methods to produce high-quality translations (Sin-wai, 2015). Second, the adaptation of the technological revolution to the translation teaching process is not sufficient (Kenny, 2020). Third, the themes that emerge in the use of machine translation are related to the lack of accuracy and subtlety of translation, the transfer of cultural nuances, and the contextual meanings between the source and target text pair (Lin, 2024; Moneus & Sahari, 2024; Wang et al., 2022). Given the deficiency of AI translation mentioned above, the key issues to be examined in the research context are subtlety and elegance in AI translation, the benefits of AI and the challenges faced by translation students, and the impact of AI translation on students' translation competency in the training process. Based on the issues mentioned here, a clear picture of how AI technology can be used effectively in the translator training process needs to be presented to base it on a pedagogical framework. Therefore, to make pedagogical implications and to develop a model of the translator training process integrated with AI, it is first necessary to deal with how translation students use AI technology in their translation activities.

Purpose of the Study

It is important not to underestimate the role of technology in education because the traditional teaching and learning method has been changed by the technological revolution, and thus a personalized teaching and a digital learning milieu has been created (Huang et al., 2021). This evolution is visible in translation education because, despite the benefits and strengths of AI technology, some significant challenges faced by

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students have also been highlighted in the studies conducted in this context (Kenny, 2020; Kong, 2022; Liu & Afzaal, 2021). From this point of view, this study identifies the challenges that arise in the translator training process and to suggest new pedagogical implications. In this way, AI technology in translation education can be used for the benefit of translation students at the intended level, and the core factors of AI in translation can be well defined. This is because AI translation, namely machine translation, needs to be evolved to produce high-quality translations (Wang et al., 2022).

Research Questions

Based on the review of the benefits and challenges of AI in the research context, the following research questions were generated to close the research gap in AI translation by exploring how it affects the students in the translator training process.

1) What are the benefits and challenges of AI translation faced by students in the translator training process?
2) How does AI affect students' competencies in the translator training process?
3) How does AI translation affect students' perceptions?

METHODOLOGY

Research Design

The research design of the study was based on a qualitative method, which included the procedures of qualitative data collection, data analysis, and data interpretation (Creswell, 2009). For the collection of the qualitative data, the in-depth interview, which is a technique for collecting detailed qualitative data in the social sciences, and in which the data are collected at intervals in a systematic way (Della Porta, 2014), was used. The qualitative content analysis method was used for data analysis (Forman & Damschroder, 2008; Kuckartz, 2019; Prasad, 2008). Here the collected data were examined in terms of the recurring themes, and the recurring themes were categorized into codes and sub-codes to provide a better understanding of the present research context.

Validity and reliability

In qualitative studies, the researcher provides the validity and reliability of the study through the document analysis method as quantitative values are not used (Creswell, 2009). Therefore, the document analysis method was used for the reliability and validity of the current study. In doing so, the academic articles published in recent years related to the current research context were analyzed, and it was found that the methods of the previous studies and the research design of the current study overlapped. In addition, the research design, data collection, and analysis methods of the current study were reviewed by two experts who have conducted similar studies in this area.

Data Collection Procedure

In this study, the qualitative data were collected through in-depth interviews conducted face to face in a conversational mode. Semi-structured and open-ended questions were used in the interviews to explore the impact of AI on translation students in the training process. Here, an *in-depth interview* model was used (Della Porta, 2014), and it was conducted in four steps involving the phases of "*introduction, initial questions, mid-interview*, and *closing the interview*" (Brounéus, 2011, pp. 139-141).

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1) *Introduction*: The aim of the study was explained to the participants and their consent was obtained. In this step, the general outline and the procedure of the study were defined.
2) *Initial questions*: Specific questions were posed to the interviewees to explore their background in relation to AI and their experiences so far. The aim here is to create a confident and comfortable setting and to prepare the interviewees for the process they would be part of.
3) *Mid-interview:* Follow-up questions were posed to the interviewees to unearth in-depth information and to obtain more specific factors of AI translation.
4) *Closing the interview:* In this step, the interviews were completed. Before concluding the interviews, the interviewees were encouraged to share their additional views related to the specific themes recurring in the process of mid-interview, and so the general discussion was made to see the big picture.

In addition to the in-depth interview method implemented face to face, Google Docs program was also used in the study as an alternative data collection instrument because "it allows interviewers to conduct online interviews in written form, ... and it can be used as an alternative to face-to-face interviews (individual or group)" (Opara et al., 2023, p. 565). The rationale for using the Google Docs program here was to collect the quantitative data when statistical values were needed, as well as the qualitative data obtained from face-to-face interviews, and when quantitative data was needed to contribute to the findings obtained from the qualitative data. In the data analyses obtained from all phases of the study, MAXQDA 2024, which is a qualitative data analysis program, was used.

Scope of the Study

The impact of AI translation on the students studying in the Department of Translation and Interpreting was examined in line with the key factors determined as a research gap after an in-depth literature review. In this regard, the following issues were examined:

a) Benefits of AI in the act of translation
b) Challenges that students face while using AI in the act of translation
c) Impact of AI on students' linguistic competence
d) Impact of AI on students' translation competence
e) Impact of AI on students' perceptions

Participants

The study involved translation students studying at the Department of Translation and Interpreting at Kafkas University, which is a state university. The study was conducted with a total of 40 volunteer students, who were selected from among all first- to fourth-year students. Ten participants were selected from each grade, and their consent was obtained before the study. The selection of the participants was based on the criteria of using AI in their daily lives and assignments, so the participants had background information on AI.

Procedure

The study was carried out during the fall term of the Academic Year 2024-2025. It was conducted at a state university, and the Ethics Committee approval from the university, with the number E-36080, was received on 01.11.2024.

Limitations

The study is limited as the data were collected from a limited number of students receiving translation education. Another limitation of the study is the difficulty in achieving objectivity in the analysis of quali-

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tative data collected from qualitative methods. To generalize and ascertain the findings, a large sample size involving a diverse group of participants is required. Viewed from this aspect, future research using different research designs, including different sample groups, is recommended.

FINDINGS

This study was based on a qualitative research design using the in-depth interview method to explore the participants' experiences with AI translation in depth. Throughout the process of the study, the participants took an active role in each step of the in-depth interview, which included four phases: a) *introduction,* b) *initial questions,* c) *mid-interview*, and d) *closing the interview*. The data gathered from the participants were categorized in terms of recurring themes.

Introduction and Participant engagement

In the first phase of the study, the participants were provided with detailed information regarding the aim and design of the study, and their consent was obtained. In this phase, the participants were encouraged to reflect on AI, to share their experiences related to the translation they had made through AI, and to discuss both the process and the outcomes of the translations they had completed. In addition, a brief group discussion was held to explore their views on the role of AI in shaping translation quality and its potential implications. The discussion at this stage showed the need for the integration of AI into translation classes and the need for a better understanding of the integration of AI into translation education, supported by different views.

Initial Questions (Pre-interview)

In the second phase of the study, specific questions about the use of AI in translation were posed to the participants. Here, their background information and views about the AI translation were handled. The data gathered in this phase revealed that nearly all the participants (n:40, 95%) used AI while translating, with a rate of 57,5% sometimes, 27,5% often, 10% rarely, and 5% always. It was also determined that a large majority of the participants used both ChatGPT (77.5 %) and DeepL (40%) among the AI-based programs.

Analysis of the findings gathered from *Mid-interviews* and *Closing the interview (Post-interview)*

In the final step of the study, the qualitative data collected from the mid-interviews in the third phase and the post-interviews in the fourth phase were analyzed in terms of recurring themes. The recurring themes represent key patterns and insights that emerged from the participants' responses, providing a structured overview of the primary areas of focus in the study. Here, hierarchical code and sub-code models, which involve the categories related to the benefits of AI, the challenges faced by the students, and the students' perceptions of AI in translation, were used to reveal the impact of AI on the translation training process.

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Benefits of AI in the act of translation

Figure 1

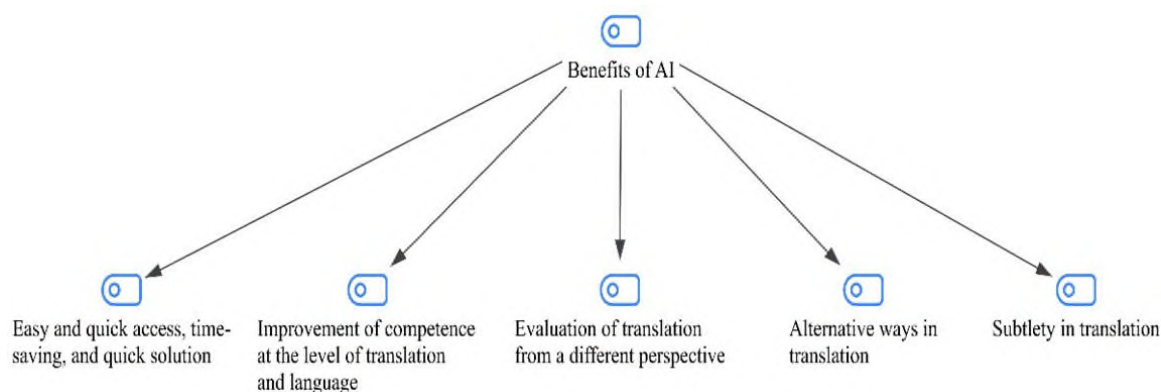*Hierarchical Code-Subcode Model of the Benefits of AI*

Figure 1 shows the hierarchical code and subcodes concerning the benefits of AI in the act of translation. Most of the students claimed that they benefited from AI in their translation activities because it allowed them to reach a quick and effective solution in a short time by providing easy and fast access. To this end, they expressed that they could evaluate the translation from a different perspective, see the alternative ways of the translated sentences, and achieve subtlety in the translation through AI.

Positive impact of AI on translation competence

Figure 2

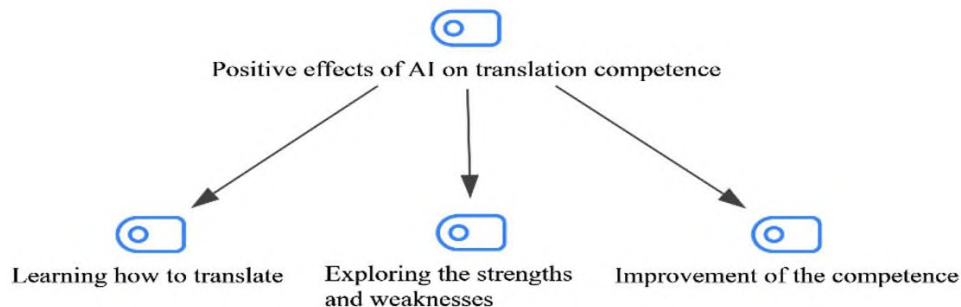*Hierarchical Code-Subcode Model of the Positive Impact of AI on Translation Competence*

Figure 2 shows the hierarchical code and subcodes concerning the positive impact of AI on translation competence. The data obtained from the participants revealed that they benefited from AI in three aspects: a) learning how to translate, b) exploring their strengths and weaknesses through AI, and c) improving their translation competence. More clearly, the use of AI in the act of translation has three main benefits for translation competence. According to the students taking an active role in the present study, when they used AI in the act of translation, they went through a learning loop affecting their translation competence. In this learning loop, they were able to learn how to translate, explore their strengths and weaknesses by comparing their translations with the AI translation, and improve their translation competence accordingly. However, they stated that the translation competence they acquired was at the linguistic level (i.e., at the level of word, phrase, or syntax).

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Positive impacts of AI on SL and TL Competence

Figure 3

Hierarchical Code-Subcode Model of the Positive impact of AI on SL-TL Competence
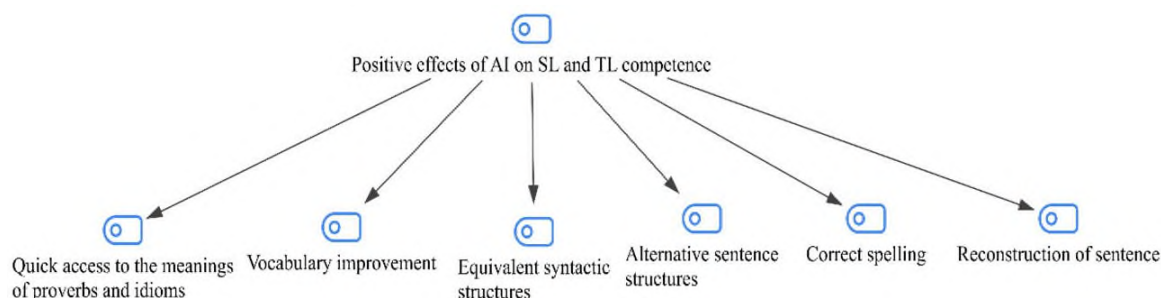

Figure 3 shows the code and sub-codes for the impact of AI on the improvement of SL and TL. According to the participants, the use of AI in translation exerted a set of positive effects on the acquisition of SL-TL competence. Here, the participants had positive views about the use of AI in translation because it provided quick but limited access to the meaning of proverbs and idioms, equivalent or alternative syntactic structures between two languages, correct spelling, and reconstruction of the sentence(s). All the factors mentioned here were found to have a direct or an indirect impact on learners' improvement in the use of SL and TL linguistic features.

Challenges that students face while using AI in the act of translation

Figure 4

Hierarchical Code-Subcode Model of the Challenges Faced
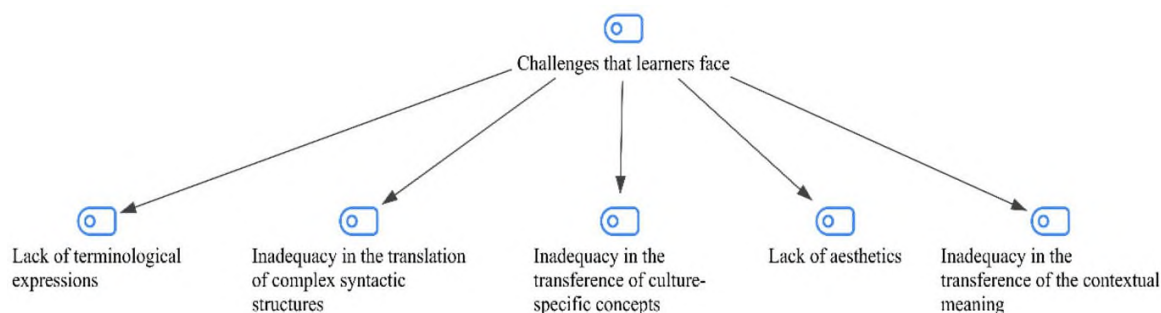
In addition to the benefits of AI, the participants stated that they faced some specific challenges while using AI in their translations. Most of the participants agreed that AI could be inadequate in terms of terminological expressions, translation of complex syntactic structures, and the transfer of culture-specific concepts. In addition, they added that the texts translated by AI lacked aesthetics and that the AI translation was not sufficient to transfer the contextual meaning and to create the semantic harmony between SL and TL. This was because the participants said that although it had intelligence, it did not have sense and feeling as it was just a machine.

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Negative impact of AI on learners' improvement

Figure 5
Hierarchical Code-Subcode Model of the Negative Impact of AI

Negative effects of AI on learners' improvement

Loss of judgement and critical thinking ability in translation

Inadequacy in langauge competence
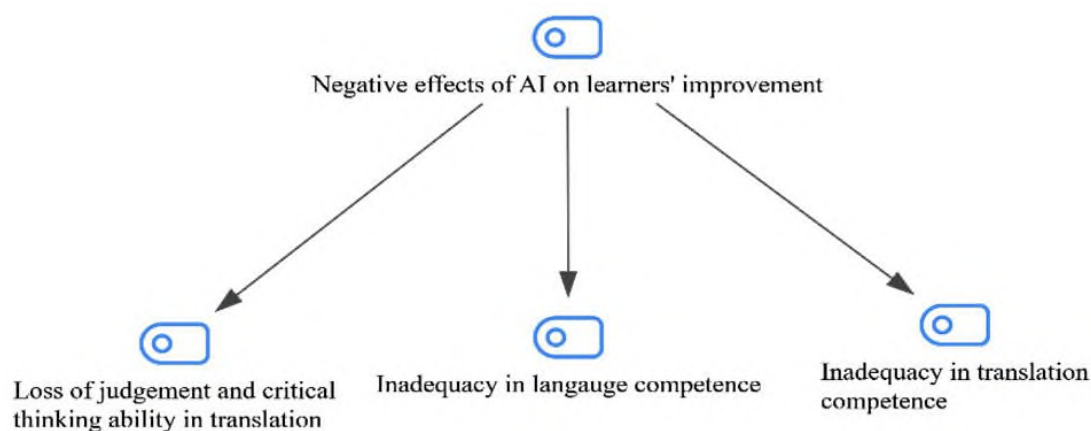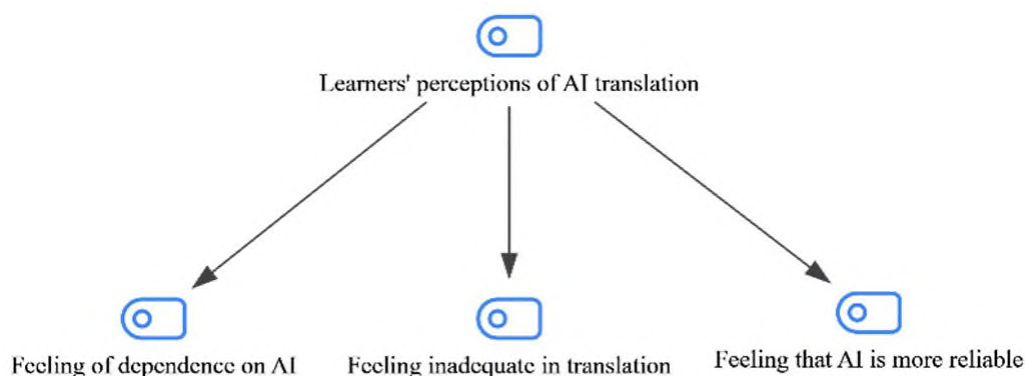
Inadequacy in translation competence

Figure 5 shows the findings in relation to the negative impact of AI on learners' improvement. Although the previous findings showed that the use of AI in translation had a positive impact on language and translation competence, it was thought to have a negative impact in the long term. Here, the participants agreed that the frequent use of AI inhibited their improvement in translation. In addition, they felt that the frequent use of AI also had a negative impact on their judgment and critical thinking in translation. It was observed that this perception caused them to reflect on their self-confidence and self-esteem.
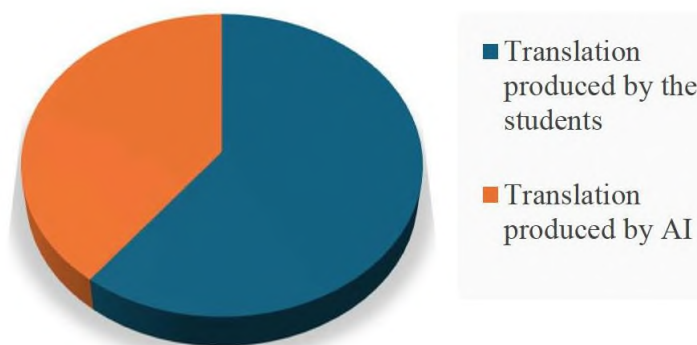
Students' perceptions of AI translation

Figure 6
Hierarchical Code-Subcode Model of Student Perception

Learners' perceptions of AI translation

Feeling of dependence on AI

Feeling inadequate in translation

Feeling that AI is more reliable

The perception of reflection on self-confidence and self-esteem, mentioned in Figure 5, stems from the two key factors shown in Figure 6. These are 'perception of dependence on AI' and 'feeling inadequate in translation'. The participants stated that the more they used AI, the more dependent they became. Furthermore, they referred to this process as AI addiction. The key issue here is reliability. While most of the participants claimed that they relied more on their translations than on those produced by the AI, nearly half of the participants stated that they found the translation produced by the AI more reliable than the one they produced. In other words, the students' perceptions of the reliability of AI and their views on AI addiction indicate that the use of AI tools in translation activities is increasing over time. Figure 7 supports this claim by illustrating the reliability rate between the student and AI translations.

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Figure 7
Percentage of Students' perceptions of AI

■ Translation produced by the students

■ Translation produced by AI

As seen in Figure 7, 40% of the participants relied on the translation produced by the AI more than their own. More clearly, less than half of the participants claimed that the translation made by the AI was of high quality as it involved correct syntactic structures, correct lexical items, and a high level of subtlety. The reason why they did not rely on their translations was that they felt that they were not good enough at translating; that is, they thought that they were not able to produce high-quality translations at the lexical, syntactic, and textual levels. Sixty percent of the participants, on the other hand, did not strictly rely on AI translation because they emphasized that AI translation, in many cases, did not produce translation at the intended quality, especially at some specific points (e.g., at the word, lexical, syntactic, textual and contextual levels). To this end, they strongly indicated that proofreading and post-editing were required to revise the translation produced by AI.

DISCUSSION

This study examined the impact of AI on translation education from the perspective of translation students. It then dealt with the benefits of AI, the challenges the students face when using AI, the impact of AI on the translator training process, and the students' perceptions of AI.

The first research question was about the benefits and challenges of AI translation that the students faced in the translator training process. According to the findings obtained from the study, the students in the Department of Translation and Interpreting frequently used AI in their translation activities. Considering the benefits of AI in translation, the findings indicated that the benefits of AI were mainly centered around the framework of SL and TL competence. Within this framework, the main sub-codes related to the general benefits of AI showed that AI produced translations quickly at the lexical, syntactic, and textual levels. In addition, it was explored that AI provided easy and quick access to translate any text, presented quick solutions and different perspectives in translation, and reduced the workload in translation. Here, the most significant positive effect of AI was found that when the students used AI in their translation activities, they went through a learning loop, namely a personalized learning process referring to individual learning by constructing the knowledge, especially through technology in recent years (Shemshack & Spector, 2020). This is because the advancement of technology has created a new learning platform as well as the traditional face-to-face teaching and learning process (Al-Badi & Khan, 2022; Huang et al., 2021). Furthermore, this learning loop made it possible for the students to explore their strengths and weaknesses in the learning domain, because AI provided fast access to the information that they needed, as stated by Zhang and Lu (2021).

In addition to the benefits of AI mentioned above, the participants stated that they faced significant challenges while using AI in their translation activities. The challenges explored in the study were centered

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around the sub-codes, which covered the lack of terminological expression, inadequate translation of complex syntactic structures, inadequate transfer of culture-specific concepts, lack of aesthetics, and inadequate transfer of contextual meaning, as highlighted in the previous studies (Lin, 2024; Liu et al., 2022; Moneus & Sahari, 2024; Wang et al., 2022). Here, the participants emphasized that proofreading was required to overcome the above-mentioned shortcomings and that post-editing in AI translation was necessary for effective translation, as also noted by Sin-wai (2015); because AI might produce an inadequate translation in some cases. Another key factor highlighted in the study was the negative impact of the frequent use of AI on the development of learners' judgment and critical thinking skills, as well as language and translation skills. According to the study by Yang and Wang (2023), the students' use of machine translation in their translation activities affected their translation performance. Here, a negative effect was found between machine translation and performance, and it was claimed that this effect was modulated directly by self-regulation and indirectly by critical thinking and motivation.

The second research question was about the impact of AI on the students' competences in the training process. Here, the study emphasized that AI exerted a positive impact on translation competence as the students were able to go through a self-learning process in which they identified their strengths and weaknesses by comparing the quality of the AI translation with the quality of the translation they produced. A review of the literature in the field of education reveals that with the advancement of technology, the most recent area of research in the last two decades has largely focused on the impact of AI on education (Chen et al., 2022; Ünsal & Karaoğlan Yılmaz, 2024). Although the technology has taken a long path and the studies conducted in this research context have revealed that the use of AI in education improves academic quality and individual achievement in the learning domain (Charles-Kenechi, 2024; Chen et al., 2020; Kuleto et al., 2021; Maghsudi et al., 2021), it seems that as the high-quality translation or the production of the translation at the intended level through AI is currently not possible, the students need to be well-trained in the translator training process (Liu & Afzaal, 2021). In addition, as AI is widely used in translation, especially by students; the use of AI in the field of education requires new pedagogical views, namely "innovative teaching methods, development of teaching materials, design of teaching action plans and student assessment" (Chen et al., 2022, p. 1271). In this respect, the findings obtained from this study emphasized the integration of AI into the translator training process as a learning tool. However, the findings of the study by Kenny (2020) indicated that the integration of machine learning into translation was challenging. This is because, despite the above-mentioned positive effects of AI, which exerted a short-term impact on the improvement of translation competence; it was found that AI exerted a long-term negative impact on the students' improvement in the process of training when it was widely used in translation activities. In addition, the findings also showed that when AI was used frequently, it negatively affected the students' knowledge acquired before. More clearly, they could not build new knowledge on their existing knowledge. At this point, the negative effect of the retroactive interference was determined. From this aspect, one of the effects of AI on translation competence must be opened to discussion about retroactive or proactive interference, since the notion of interference was found to be a key phenomenon in the study. To overcome the negative effects of interference and to turn the negative interference into positive interference, the students in the translator training process need to be made aware of the conscious use of AI. Furthermore, the issue here is how to integrate AI into the learning process to turn it into an effective learning tool, as highlighted in the previous studies conducted in the research context (Gašević et al., 2023; Kenny, 2020).

The third research question in the study was about the impact of AI on the students' perceptions. The impact of AI on the students' perceptions centered on a triad: a) feeling dependent on AI, b) feeling inadequate at translating and, c) feeling that AI was more reliable. The most striking issue was that the students felt dependent on AI. In other words, they felt addicted to AI and worried about being inadequate without it.

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Likewise, the study by Seo et al. (2021) claimed that AI use inhibited individual and independent learning. A similar study by Liu et al. (2022) indicated that according to some learners, machine translation was essential for a high-quality translation. Another similar study conducted by Malik et al. (2023) highlighted that the use of AI raised concerns for some learners about creativity, critical thinking skills, and ethical issues. When viewed from this aspect, the findings of this study overlapped with those of the above-mentioned studies. However, contrary to these studies, this study brought AI addiction to the forefront.

To sum up briefly, the findings of the study lead the researcher to some specific conclusions that will contribute to the research context. In this regard, AI plays a key role in the act of translation, and it brings new opportunities and challenges to the teaching of translation. When viewed from the aspect of the benefits and challenges that the students face while using AI in their translation activities; AI translation, on the one hand, is effective at both lexical and syntactic levels; but, on the other hand, it is insufficient in the transfer of the cultural values and terminological expressions. In addition, AI provides a learning platform to the students, namely they can personalize their learning style with the help of AI. However, translation through AI causes negative interference when used frequently. To this end, it hinders the improvement of translation. In addition, the use of AI turns out to be an addiction over time, and so the integration of AI into the translation teaching process emerges as an issue to be discussed.

CONCLUSION

This study examines the benefits of AI and the challenges that translation students face while using AI. To this end, the study explores the impact of AI on the students' translation competences, their improvements, and their perceptions of AI technology. The findings of the study reveal pedagogical implications for the use of AI in translation classes, as the integration of AI into translation education requires novel and innovative approaches.

The study highlights that AI affects the students' improvement in translation to some extent by providing various alternative translation versions. This is because AI translation is generally adequate for translation at the linguistic level (i.e., at the level of words, phrases, and sentences). However, it is inadequate for translating complex syntactic structures and some specific expressions that require a deeper understanding of sociocultural values and contextual meaning (i.e., culture specific concepts, terminological expressions, and idiomatic expressions between the two languages, here English and Turkish). From this aspect, proofreading and post-editing come to the fore as an essential step in AI translation because AI provides the students with a guiding draft that needs to be revised and refined in terms of linguistic accuracy, cultural references, idiomatic expressions, and terminological accuracy.

The study underlines that AI creates a self-learning cycle that exerts a positive influence on the students' improvement in translation. In such a learning process, the students explore their weaknesses and strengths in translation by evaluating the quality of the translation they have produced. From this viewpoint, AI increases learning efficiency, provides easy access to the information students need, and most importantly, prepares students to acquire technological skills. However, the study prioritizes the significance of AI addiction and the retroactive negative interference of AI in translation, which stems from the frequent use of AI. At this point, the study shows that the students do not construct new knowledge on their previous knowledge of translation because they quickly access the translated versions with the help of AI, and so they do not try to analyze the nuances between the source and target texts and to reflect on the translation process to gain an understanding of the linguistic and non-linguistic factors affecting the quality of the translation. As a result, the students do not internalize the knowledge required to produce a high-quality translation, and AI dulls their enthusiasm for acquiring new knowledge or using the knowledge that they have acquired. To prevent AI addiction and to turn it into an effective learning tool in translation education,

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the study indicates that students need to be made aware of how to use AI consciously and ethically in their translation activities to understand the limitations of the use of AI, to gain a sense of creativity and productivity, and, most importantly, to be original in their translations.

To sum up, as stated by the participants in the study, AI has intelligence, but it does not have sense and feeling as it is just a machine, and translation requires more than intelligence. This is because translation requires norms, cultural and social values, the interpretation of contextual meaning, and perhaps much more.

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