Migration Letters

Volume: 20, No: S2(2023), pp. 932-943

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)
www.migrationletters.com

Evaluating the Role of Artificial Intelligence in Advancing Translation Studies: Insights from Experts

Dr. Mohamad Ahmad Saleem Khasawneh[1], Dr. Mohammad Ghazi Raja Al-Amrat[2]

Abstract

The role of artificial intelligence in advancing translation studies has been discussed in the literature, and focus has been on implementation of AI-models in translation studies. Incorporation of AI in translation studies completely revolutionized the translation procedures, leading to enhanced efficiency and accuracy. This article focused on broadening the views of experts in translation studies. The main concern is to evaluate the insights from translation experts on the degree of impact of artificial intelligence in advancing translation studies. The study community include identified stakeholders in the revolutionized translation studies, including experts in translation practice, lecturers at universities, post graduate students and university administrators. The study sample is 367 participants drawn from the stakeholders' groups, including 167 (45.50%) translation practice experts, about 100 (27.25%) post graduate students in translation studies, a total of 50 (13.63%) lecturers and 50 (13.63%) university administrators. A structured questionnaire, designed as Google Form, was distributed to the stakeholders. Data was analysed using relevant statistical tools, including calculation of the frequencies, percentages, mean, and standard deviation of the responses of the stakeholders. A t-test analysis was also conducted to validate the developed hypotheses, and tables of descriptive statistics were provided to summarize the results. The result reveals that a majority of the study sample (over 64%) argue that the integration of AI in translation studies has had a positive impact on the quality of graduates in this field, and over 70% believe that the incorporation of AI in translation studies has led to an enhancement in translation precision and accuracy. The result also reveals that over 53% of the stakeholders affirmed that the utilization of AI models in translation studies has a positive correlation with the global recognition of the translation industry and will make translation activities more appealing to investors.

Keywords: *Artificial Intelligence, translation studies.*

1. Introduction

The utilisation of artificial intelligence within the field of translation studies has been a subject of discussion among various interested parties. Asscher (2023) notes that there are divergent views among stakeholders regarding the potential of AI as an exciting innovation that can revolutionise the field of translation. While some stakeholders are optimistic about its prospects, others are uncertain about its ability to replace human translators. Proponents of "artificial intelligence (AI)" in the field of "translation studies" contend that this technology has the potential to offer expedited and precise translations,

[1] Assistant Professor, Special Education Department, King Khalid University, Saudi Arabia, mkhasawneh@kku.edu.sa, https://orcid.org/0000-0002-1390-3765
[2] Assistant Professor, Special Education Department, Jadara University, m.alamrat@jadara.edu.jo

diminish expenses, and enhance efficacy. Notwithstanding, critics of "artificial intelligence (AI)" in the domain of "translation studies" raise concerns over the calibre of translations generated by machines, the probable displacement of human translators from their jobs, and the incapacity of machines to comprehend the subtleties of language and the social setting. The ongoing discourse regarding the involvement of artificial intelligence (AI) in the domain of translation studies is yet to determine the potential implications of this technology on the field in the forthcoming years (King, 2019; Liu, 2022).

Stakeholders hold divergent views on the significance of artificial intelligence designs within the domain of translation studies. The utilisation of artificial intelligence (AI) in the field of translation has been a subject of discussion and analysis among scholars, practitioners, and industry experts (Tao and Wang, 2023; Huashu, 2019; Liebling et al., 2020; Wang, 2023). There exists a divergence of opinion among stakeholders regarding the impact of AI on the field of translation. While some contend that AI has brought about a revolutionary transformation by enhancing the precision and efficacy of translations, others assert that it has had an adverse effect on the quality of translations and has diminished the necessity for human translators. From one perspective, certain stakeholders maintain that AI consistently enhance the outcome of translations. The disparity in viewpoints underscores the ongoing discourse regarding the efficacy of artificial intelligence in the field of translation and the degree to which it can supplant human proficiency. There are divergent views regarding the impact of AI on translations. Proponents assert that AI has enhanced the efficacy and precision of translations, while detractors contend that it has undermined the importance of human translators. The aforementioned circumstances have instigated concerns regarding the possibility of employment reduction and the depreciation of human proficiency within the respective domain (Olohan, 2019; Afzaal, 2023; Burada, 2021).

The main aim of this study is to investigate the importance of artificial intelligence in the advancement of Translation Studies. The objective of the research is to acquire significant perspectives from distinguished professionals in the discipline to attain a thorough comprehension of the topic. The study will centre on the examination of the effects of artificial intelligence on Translation Studies and its transformative influence on the discipline. The investigation will additionally examine the possible advantages and disadvantages of Artificial Intelligence (AI) within the field of Translation Studies.

2. Literature Review

The advent of artificial intelligence (AI) has resulted in substantial transformations across various domains, including interpersonal interaction and research on translation. The influence of artificial intelligence on these domains has been significant, as technological progress has resulted in the creation of refined algorithms and instruments capable of swiftly and precisely handling and evaluating linguistic information (Muravey, 2020).

A. How AI has Revolutionized Translation Practices

The utilisation of artificial intelligence has facilitated the expeditious and precise completion of translations to an unprecedented degree. Consequently, the function of translators has undergone a transformation, necessitating the acquisition of a fresh skill set that encompasses collaborating with artificial intelligence (AI) technologies. Consequently, the possibility of translating substantial amounts in information within a comparatively brief period has been realised. The translation industry has undergone a significant transformation owing to the advent of advanced technologies. The utilisation of these innovations has enabled both enterprises and individuals to effectively communicate and share information with individuals from diverse linguistic backgrounds, without encountering any noteworthy hindrances (Wei, 2022; Wilss, 2014; Xin, 2022).

The emergence of machine translation has significantly transformed the language translation process. The emergence of this phenomenon has created novel opportunities for interpersonal and corporate communication and cooperation among individuals and organisations with diverse linguistic and cultural backgrounds, thereby promoting enhanced global interconnectedness and comprehension (Liu, 2022; De-Cespedes, 2020; Jiang and Lu, 2020; Zhao, 2020).

Tao and Wang (2023) assert that the implementation of artificial intelligence (AI) has significantly transformed the industry, facilitating enhanced precision and efficiency in the domain of translations. The utilisation of AI-powered translation tools has gained significant traction in recent times, enabling expedited and economically efficient translations. The aforementioned tools employ ML techniques to scrutinise and construe language, thereby furnishing precise translations instantaneously. The translation industry has experienced increased accessibility to both businesses and individuals, thereby enabling effective communication across language barriers. An example of a model is the translation platform that operates on cloud infrastructure and offers automated translation services. The utilisation of this technology has brought about a significant transformation in the translation industry, as it has facilitated the expeditious and effective translation of substantial amounts of content for commercial enterprises. The utilisation of artificial intelligence enables these platforms to effectively interpret textual, auditory, and visual content in various languages, thereby facilitating seamless communication between businesses and their international clientele.The employment of cloud-based translation systems has gained significant traction among enterprises that aim to broaden their global market presence (Huashu, 2019). The utilisation of translation platforms has become increasingly prevalent in the corporate world, primarily due to their capacity to offer an economical and effective resolution for the translation of extensive amounts of data (Munday, 2009). Such systems provide an efficient mechanism for enterprises to convert their content, encompassing a wide range of materials such as documents and websites, into numerous languages.

The emergence of ML systems has indisputably transformed the translation sector; however, it has also engendered apprehensions regarding the employment stability of human translators. Although these platforms provide a more expedient and economical approach to translating content, they do possess certain constraints. Machine translation may be limited in its ability to comprehend the subtleties of language, cultural allusions, or idiomatic phrases that are crucial for precise and efficient communication. The extensive implementation of machine translation has raised concerns among certain professionals regarding the possibility of a reduction in the necessity for human translators, which could potentially jeopardise their means of subsistence. The utilisation of artificial intelligence (AI) in the field of translation has been a subject of contention among scholars and professionals, with certain individuals expressing apprehension regarding the possibility of it leading to the replacement of human translators. This holds particularly true for translation tasks at a lower level, where artificial intelligence has demonstrated noteworthy advancements in recent times. The implementation of AI technology has the ability to enhance operational efficiency and decrease expenses. However, it is crucial to take into account the possible implications on the labour market and the calibre of translations, as highlighted by Liebling et al. (2020), Afzaal (2022), and King (2019). Achieving equilibrium between the advantages of artificial intelligence and the imperative to safeguard human proficiency and ingenuity within the translation sector is of paramount importance.

B. Exploring Diverging Views on the Impact of AI in Translation Studies and Practices

Divergent perspectives exist among prominent stakeholders regarding the potential of artificial intelligence in promoting the field of translation studies. There exists a divergence of opinions among stakeholders regarding the potential of AI for improving

the standard and effectiveness of translation. While some proponents advocate for its efficacy, sceptics remain doubtful about its capacity to entirely supplant human translators (Jiang and Lu, 2020). The existence of varying viewpoints underscores the necessity for additional investigation and assessment of the possible advantages and drawbacks associated with the utilisation of artificial intelligence within the realm of translation studies.

Liu (2022) posits that the present AI technologies lack the requisite advancement to entirely supplant human translators. Although AI has made notable advancements in the domain of language translation, it still falls short of the nuanced comprehension of language and cultural context that human translators possess. Moreover, human translators possess the capability to decipher idiomatic phrases and colloquial language, which could pose a challenge for AI to precisely translate. It is noteworthy that AI technologies are in a state of constant evolution and advancement, and there exists a possibility that they may attain a level of complexity that enables them to completely supplant human translators. Asscher (2023) argues that machine translations are insufficient in capturing the cultural nuances and contextual complexities of a text, leading to inaccuracies in the translation process. The argument posits that although machines possess the capability to translate words and phrases, they lack the capacity to fully grasp the cultural and linguistic subtleties that are indispensable for precise translation. Consequently, depending exclusively on automated translations may prove inadequate in effectively communicating the intended semantics of a given textual content.

There exists a diversity of perspectives regarding the utilisation of artificial intelligence (AI) technologies in the domain of translation. However, certain scholars assert that such technologies can serve as a crucial instrument for translators and experts in the field of translation studies. Furthermore, it has been suggested that the implementation of AI technology can facilitate the detection and rectification of errors in translations, thereby enhancing the overall precision of the end result. Nevertheless, it is noteworthy to acknowledge that there exist apprehensions regarding the probable constraints and disadvantages associated with an excessive dependence on AI in the domain of translation. Wei (2022), Xin (2022), and Wang (2023) have posited that the integration of artificial intelligence (AI) technologies within the domain of translation has the potential to augment the efforts of human translators by providing them with suggestions and translations. The implementation of this approach may result in a more optimised and effective translation procedure, ultimately leading to temporal and material savings. Advocates of AI technologies contend that these instruments have the potential to significantly reduce the workload of human translators, in addition to their main argument. This, in turn, enables them to focus on more complex and nuanced translations that require human expertise. The aforementioned can result in an enhanced and proficient process of translation on the whole, along with an elevated standard of translated material.

C. Different Patterns of Artificial Intelligence and Their Impacts in Translation Studies

1. Machine Translation and its influence on the field of Translation Studies

The impact of Machine Translation (MT) on the field of Translation Studies has been significant. The progress of Machine Translation (MT) systems has been remarkable, primarily attributed to the integration of sophisticated technologies, including Neural Machine Translation (NMT) and Deep Learning methodologies. The progressions in technology have facilitated the Machine Translation (MT) to produce translations of superior quality than the ones that were previously attainable (Wang, 2023; Crisostomo et al., 2022; Asscher, 2023). Machine Translation (MT) has been employed by scholars to

scrutinise the process of translation, draw parallels between human and automated translations, and explore the impact of MT on the field of translation.

Translation Memory and Computer-Assisted Translation

The translation sector frequently employs "Translation Memory (TM) and Computer-Assisted Translation (CAT)" as two prevalent tools. The Translation Memory (TM) is a repository that archives previously translated material, enabling translators to recycle translations and ensure coherence throughout various texts. Computer-assisted translation (CAT) software facilitates the translation procedure through offering recommendations and automating recurring tasks for translators.

Computer-assisted translation (CAT) tools have garnered substantial traction within the translation sector and are being utilised for numerous years. The objective of these instruments is to aid human translators by providing them with entry to "Translation Memory" (TM) records that retain formerly translated texts. The importance of computer-assisted translation (CAT) tools in the field of Translation Studies has grown progressively. Researchers have employed computer-assisted translation (CAT) devices to investigate the impact of translation memory (TM) on the method of translation, scrutinise the role of human translators in the translation procedure, and compare translations produced with and without the aid of CAT tools.

Multimodal Translation

In multimodal translation, the translator is required to consider not only the linguistic aspects of the content but also its visual and auditory elements. This type of translation is becoming increasingly important in today's digital age, where multimedia content is prevalent and often requires translation for global audiences.

The field of Translation Studies has seen a growing significance in the study of Multimodal Translation. Multimodal Translation is a type of translation that deals with texts that contain non-verbal components, such as videos, pictures, and audio. The application of various technologies has enabled researchers to explore the difficulties associated with multimodal translation, create fresh translation algorithms for multimodal texts, and assess the effectiveness of human versus machine translations of multimodal texts.

D. Research Objectives

The main focus of this article is to explore the impact of artificial intelligence in advancing translation studies. We made effort to extract insights from key stakeholders in translation and translation studies, focusing on their views concerning how artificial intelligence has revolutionized translation studies. The study also aims to expound on different AI models and their impacts on translation studies.

E. Research Hypothesis

Three hypotheses will be tested in this study, including:

H1: The integration of AI in translation studies has the potential to enhance the speed and precision of the translation process, amount to training of professional translators, ultimately resulting in better quality translations.

H2: The more AI-Models and tools are used in translation studies, the higher the translation business and increase in human translators.

3. Study Methodology

A. Study Approach

The study utilized an analytical approach and collected data through surveys that were administered to the research's respondents. We opted for a quantitative survey design to effectively assess the influence of AI tools in the advancement of translation studies.

B. Study Community

The community being studied comprises of various stakeholders who have been identified as being involved in the revolutionized field of translation studies. These stakeholders include experts in the practice of translation, lecturers who teach translation courses at universities, post-graduate students who are pursuing advanced studies in translation, and university administrators who oversee the management of translation programs. The focus of the study is to gain a deeper understanding of the roles and perspectives of these stakeholders in the field of translation studies, and to explore how they are contributing to the advancement of this field.

C. Sampling

The study involved a sample of 367 participants who were selected from various stakeholder groups. The study sample is 367 participants drawn from the stakeholders' groups, including 167 (45.50%) translation practice experts, about 100 (27.25%) post graduate students in translation studies, a total of 50 (13.63%) lecturers and 50 (13.63%) university administrators. A structured questionnaire, designed as Google Form, was distributed to the stakeholders.

D. Data Collection Procedure

We collected data through questionnaire, which was distributed electronically across to the study participants. The questionnaire three main parts, which include the demographic variables, three questions to validate hypothesis one, and another three questions to test hypothesis two. All the questions, except the demographic variable, were designed using 5-point Likert scale.

E. Data Analysis Procedure

Data was evaluated through different statistical tecniques, including calculation of the frequencies, percentages, mean, and standard deviation of the responses of the stakeholders. A t-test analysis was also conducted to validate the developed hypotheses, and tables of descriptive statistics were provided to summarize the results. The descriptive statistics tables included measures such as mean, standard deviation, t-values, and standard errors. The purpose of these tables is to provide a clear and concise representation of the data, allowing the reader to easily interpret the results.

4. Result and Discussion

4.1. Result

Two hypotheses are tested, as the questions in the questionnaire were developed from each of the hypothesis.

A. Result for Hypothesis One: The integration of AI in translation studies enhance the speed and precision of the translation process and the training of professional translators, ultimately resulting in better quality translations

Table 1: Descriptive Statistics for the Result of Hypothesis 1

Question Items	**SA**	**A**	**N**	**D**	**SD**	**Mean**	**St.D**	**t-value**	**Std Error**
The implementation of AI in translation studies has enhanced the quality of graduates in translation studies	**24.8**	**40.8**	**24.1**	**8.7**	**1.6**	**3.60**	**1.04**	**11.07**	**0.05**
The integration of AI in translation studies has facilitated the teaching and learning of translation at the university level	**33.4**	**41.4**	**18.4**	**5.7**	**1.1**	**3.78**	**0.94**	**18.31**	**0.04**
Translation precision and accuracy have improved as a result of the integration of AI in the teaching of translation studies.	**25.5**	**45.5**	**21.0**	**6.5**	**1.5**	**3.69**	**0.98**	**14.09**	**0.04**

“SA= Strongly Agree”; “A=Agree”; “N=Neutral”; “D=Disagree”; “SD=Strongly Disagree”; “St.D=Standard Deviation”; “Highest Mean=3.78”; “Lowest Mean=3.60”; “Range=0.18”

The table 1 above is the use of descriptive statistics to summarize the result to validate the first hypothesis. It can be seen from the table that more than 64% of the research sample generally accepted that the implementation of artificial intelligence in translation studies has enhanced the quality of graduates in translation studies. In other words, translators, lecturers, post graduate students in translation studies and university administrators affirm that the implementation of AI in translation studies has enhanced the quality of graduates in translation studies. Less than 10% of the study population refute this claim, while over 24% remained neutral. The implication is that both practical translators and direct stakeholders in translation studies affirm the impact of AI tools in training translation experts. Also, over 74% of the respondents collectively accepted that the integration of AI in translation studies has facilitated the teaching and learning of translation at the university level. This is refuted by less than 7% of the sample, while 18.4% remained neutral. In the same vein, over 70% of the sample affirm that translation precision and accuracy have improved as a result of the integration of AI in the teaching of translation studies. This finding may be as a result of the fact that AI has enabled graduates and post graduates to enhance their translation skills.

The hypothesis is being tested through the use of a "one-sample t-test" on all of the 3 questions. The aim is to determine if the mean value varies significantly from the neutral score of 3.0. Based on the t-values presented in the table, it can be concluded that the mean scores for all three questions are significantly higher than the neutral score of 3.0. This conclusion is supported by the p-values, which are less than 0.05. The data supports the hypothesis that integrating AI in translation studies can improve the speed and accuracy of the translation process, as well as the training for expert translators. This, in turn, can lead to higher quality translations.

The descriptive statistics table suggests that the respondents' perspective on the incorporation of artificial intelligence in translation studies is predominantly positive. The data shows that the participants generally hold a positive view towards the potential benefits of AI in various areas. The data shows that the standard deviations for all three questions are low. This implies that the responses fall squarely and approximately to the mean, demonstrating a significant degree of acceptance among the people who responded.

B. Result of Hypothesis Two

Three questions in the questionnaire were also directed at validating the second hypothesis. In other words, the results of the three questions are used to either reject or accept the hypothesis. The following descriptive statistics summarizes the results:

Table 2: Result of Questions from Hypothesis 2

Question Items	**SA**	**A**	**N**	**D**	**SD**	**Mean**	**St.D**	**t-value**	**Std Error**
The more AI models are used in translation studies, the more the business of translation becomes globally recognized	**17.20**	**38.97**	**24.14**	**13.38**	**6.31**	**3.32**	**0.91**	**11.85**	**0.05**
The integration of AI in translation studies will lead to attracting more students to study translation and generating a larger workforce for the translation business	**20.96**	**36.21**	**22.20**	**13.07**	**7.56**	**3.25**	**0.90**	**13.56**	**0.04**
Investors will find translation activities attractive when universities integrate AI models in translation studies and advance the models of communication through translation	**16.12**	**38.24**	**24.94**	**14.35**	**6.35**	**3.20**	**0.91**	**11.32**	**0.05**

The result in the above table provides insights from the key stakeholders in translation studies, supporting the proposition that the integration of AI models and tools in translation studies will not only enhance the teaching efficiency, but will make the translation industry more attractive for investors, which may attract more students to study translation. As can be seen in the table, over 50% of the participants generally accepted that the more AI models are used in translation studies, the more the business of translation becomes globally recognized. In other words, translation will not be considered as an additional business, but the main business of many people because the

teaching has embraced sophisticated innovations and advanced the learning strategies. Similarly, over 56% of the stakeholder, which are professional translators, lecturers, university administrators and postgraduate students in translation studies, collectively accepted that the integration of AI in translation studies will lead to attracting more students to study translation and generating a larger workforce for the translation business. This finding is above 20% that refuted the claim, and the 22.20% that remained neutral. Furthermore, over 53% of the study population affirm that investors will find translation activities attractive when universities integrate AI models in translation studies and advance the models of communication through translation. The implication is that when translators are trained with advanced and innovative tools, they will be more productive, innovative, and the translation will be globally recognized which will attract investors.

The mean is a measure of central tendency which reflects the average value of the responses. Additionally, the standard deviation is a measure of dispersion that indicates the degree of variation in the responses. The t-value is calculated by taking the variation between the mean scores of the sample data and the null hypothesis, and dividing it by the standard error of the sample. This value is then compared to a critical value from a t-distribution to determine whether the difference between the sample mean and null hypothesis is statistically significant. The concept of standard error pertains to the degree of precision in the estimation of the mean value.

To test the hypothesis, we conducted "t-test" on the available data. We formulated a null hypothesis that posits the absence of a significant correlation between the utilization of AI models in translation studies and the growth of the translation industry and the growing number of human translators.

Table 3: Result of the two-tailed t-test

Questions	**t-values**	**Degree of freedom**	**P-values**	**Results**
Q1	**11.85**	**366**	**<0.001**	**Significant relationship**
Q2	**13.56**	**366**	**<0.001**	**Significant relationship**
Q3	**11.32**	**366**	**<0.001**	**Significant relationship**

The empirical evidence suggests a significant association between the application of machine learning algorithms in the field of translation study and the expansion of the field of translation, alongside a rise in the level of human translators. All computed p-values fall below the set value of significance of 0.05, indicating adequate proof for rejecting the null hypothesis. The statistical data in the table suggests a general consensus among the participants regarding the favourable impact of Artificial Intelligence (AI) on translation studies, the translation industry, and its workforce. The degree of consensus seems to be quite substantial. The t-test findings demonstrate a statistically significant association between the application of artificial intelligence in translation research and the expansion of the translation sector, alongside the quantity of human translators. The aforementioned assertion suggests that the integration of artificial intelligence technology within the field of translation research has the capacity to generate advantageous consequences for the translation industry.

Discussion

The findings presented provide a thorough understanding of the perspectives held by significant stakeholders in the field of translation studies. The findings suggest that professionals in the field of translation, including practitioners, educators, and scholars, as well as academic institutions, share a consensus regarding the imperative of fully incorporating artificial intelligence (AI) techniques and resources into the discipline of translation studies. The initial hypothesis was corroborated, revealing that a significant proportion of the study group (in excess of 64%) contend that the incorporation of artificial intelligence (AI) within the domain of translation studies has yielded favourable

outcomes with respect to the calibre of graduates in this discipline. In accordance with the accounts of translators, educators, postgraduate scholars in the domain of translation studies, and academic officials, the incorporation of artificial intelligence in the realm of translation studies has led to an enhancement in the quality of graduates in this discipline. The claim in question is supported by a significant proportion of the research sample, particularly exceeding 65%. Nonetheless, the assertion was challenged by a minority of the populace, constituting less than 10%, while a significant proportion of approximately 24% refrained from taking a definitive position and maintained a neutral stance. The assertion posits that artificial intelligence (AI) tools exert a noteworthy impact on translation experts, a fact recognised by both practitioners and scholars engaged in translation research. According to the analysis, a significant proportion of participants, namely 74%, concurred that the integration of artificial intelligence (AI) in the field of translation studies has yielded favourable outcomes in terms of enhancing the pedagogical practises and educational outcomes in tertiary institutions.

On the other hand, 18.4% of the sample remained neutral, suggesting that they did not have a strong opinion on the matter. According to the data collected from the sample, a significant majority of over 70% believe that the incorporation of AI in the instruction of translation studies has led to an enhancement in translation precision and accuracy. The possible reason behind this discovery is that the utilization of AI has allowed individuals with graduate and post-graduate qualifications to improve their abilities in translation. Based on the data presented in the descriptive statistics table, it can be inferred that the majority of respondents hold a favorable view towards the integration of artificial intelligence in translation studies.

According to the data, more than half of the participants agreed that the utilization of AI models in translation studies has a positive correlation with the global recognition of the translation industry. The statement suggests that translation has become a primary source of income for many individuals due to advancements in teaching techniques and learning strategies. It implies that translation is no longer viewed as a supplementary business, but rather a significant and lucrative profession. According to this survey conducted which included stakeholders in the field of translation studies, including professional translators, lecturers, university administrators, and postgraduate students, over 56% of respondents agreed that the incorporation of artificial intelligence (AI) in translation studies would have a positive impact on the industry. Specifically, they believed that it would increase the number of students interested in studying translation and ultimately lead to a larger workforce in the translation business. The finding indicates that more than 20% of the data contradicted the claim, while 22.20% of the data did not support either side. According to the study, a majority of the population (53%) believes that the integration of AI models in translation studies by universities will make translation activities more appealing to investors. This is expected to enhance the communication models through translation.

5. Conclusions

This article extracted the views of main stakeholders in the revolutionized translation studies, on the impact of AI in advancing translation studies and practice. The focus of the study was to evaluate the views of the stakeholder groups, including professional translators, lecturers in translation studies, postgraduate students in translation, and university administrators. A survey design was used to get the required data through questionnaire, and the responses were analysed through the prism of the two projected hypotheses. A t-test analysis was also conducted and the two hypotheses were texted. The findings indicate that a greater percentage of the main stakeholders acknowledge the impact of AI when integrated to translation studies. The findings also indicate that over 73% of the stakeholder affirm that increased integration of AI models and tools in

translation studies will lead to the development of skilled translators, and attract investors to make translation business a globally recognized business. It is thus concluded here that the integration of AI into translation studies will produce novel techniques and tools for studies in translation, leading to collaborations and innovative models for teaching translation

Acknowledgments

The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through Small Research Groups under grant number (RGP.2 / 560 /44).

References

Afzaal, M. (2022). Critical Perspectives on Digitization of Translation: Challenges and Opportunities: When Translation Goes Digital: Case Studies and Critical Reflections (Palgrave Studies in Translating and Interpreting) by Renée Desjardins, Claire Larsonneur, and Philippe Lacour, London, Palgrave Macmillan, 2020, $90.4; Using Computers in the Translation of Literary Style: Challenges and Opportunities, by Roy Youdale, London and New York, Routledge, 2019.

Asscher, O. (2023). The position of machine translation in translation studies: A definitional perspective. Translation Spaces.

Bacaksiz, A. D. (2019). The future of translation studies through artificial intelligence (Master's thesis, Sosyal Bilimler Enstitüsü).

Burada, M. (2021). Translation Studies and Information Technology–New Pathways for Researchers, Teachers and Professionals. Cultural Perspectives-Journal for Literary and British Cultural Studies in Romania, (26), 231-239.

Crisostomo, M., P Bernarte, R., & C Ambag, S. (2022). Cross-Cultural Translation Studies in the Context of Artificial Intelligence: Challenges and Response. European Online Journal of Natural and Social Sciences: Proceedings, 11(4 (s)), pp-187.

De Cespedes, B. R. (2020). Beyond the margins of academic education: identifying translation industry training practices through action research. Translation & Interpreting, The, 12(1), 115-126.

Huashu, W. A. N. G. (2019). Translation Technology Teaching at MA Level: Problems and Suggestions in the Age of AI. 한국외국어대학교 통번역연구소 학술대회, 25-25.

Jiang, K., & Lu, X. (2020). Natural language processing and its applications in machine translation: A diachronic review. In 2020 IEEE 3rd International Conference of Safe Production and Informatization (IICSPI) (pp. 210-214). IEEE.

King, K. M. (2019). Can Google Translate be taught to translate literature? A case for humanists to collaborate in the future of machine translation. Translation Review, 105(1), 76-92.

Liebling, D. J., Lahav, M., Evans, A., Donsbach, A., Holbrook, J., Smus, B., & Boran, L. (2020). Unmet needs and opportunities for mobile translation AI. In Proceedings of the 2020 CHI conference on human factors in computing systems (pp. 1-13).

Liu, D. (2022). IoT-Based English Translation Teaching from the Perspective of Artificial Intelligence. International Journal of Antennas and Propagation, 2022.

Munday, J. (2009). The Routledge companion to translation studies. Routledge.

Muravev, Y. (2020). Machine translation and legal tech in legal translation training. In Proceedings of the International Scientific Conference-Digital Transformation on Manufacturing, Infrastructure and Service (pp. 1-7).

Olohan, M. (2019). Technology, translation. In Routledge encyclopedia of translation studies (pp. 574-578). Routledge.

Tao, Y., & Wang, H. (2022). Introduction to the special issue Translation technology teaching: views and visions. The Interpreter and Translator Trainer, 16(3), 271-274.

Wang, Y. (2023). Artificial Intelligence Technologies in College English Translation Teaching. Journal of Psycholinguistic Research, 1-20.

Wei, Z. (2020). The development prospect of English translation software based on artificial intelligence technology. In Journal of Physics: Conference Series (Vol. 1533, No. 3, p. 032081). IOP Publishing.

Williams, J., & Chesterman, A. (2014). The map: a beginner's guide to doing research in translation studies. Routledge.

Wilss, W. (2004). Translation studies. Translation in undergraduate degree programmes, 59.

Xin, Y. (2022). A Systematic Study on the Application of Information Technology in Teaching Japanese Translation Courses. Wireless Communications and Mobile Computing, 2022.

Xiao, K., & Martín, R. M. (2020). Cognitive Translation Studies: Models and methods at the cutting edge. Linguistica Antverpiensia, New Series–Themes in Translation Studies, 19.

Yu, M. (2021). The dilemmas and reform of translation education in the age of artificial intelligence. In 2021 2nd International Conference on Artificial Intelligence and Education (ICAIE) (pp. 40-44). IEEE.

Yves, G. (2019). Impact of technology on Translation and Translation Studies. Russian Journal of Linguistics, 23(2), 344-361.

Zhao, W. (2020). A practical study on college English translation teaching based on CAT technology. In Journal of Physics: Conference Series (Vol. 1533, No. 2, p. 022062). IOP Publishing.

Zheng, S., & Zhu, S. (2020). A study of computer aided translation based on artificial intelligence technology. In Journal of Physics: Conference Series (Vol. 1646, No. 1, p. 012127). IOP Publishing.