



Exploring Senior Lecturers' Perspectives on the Integration of Artificial Intelligence (AI) in Foreign Language Pedagogy

¹ Nisar Ahmad Koka, ² Suaad Muhammad Saeed Alqahtani, ³ Basim Hamdan
Ibrahim Kana'an, ⁴ Javed Ahmad,

¹Department of English, College of Languages and Translation, King Khalid University, Abha, Kingdom of Saudi Arabia, ncoka@kku.edu.sa

²Department of English, College of Languages and Translation, King Khalid University, Abha, Kingdom of Saudi Arabia, ssaeed@kku.edu.sa

³Department of English, College of Languages and Translation, King Khalid University, Abha, Kingdom of Saudi Arabia bkanan@kku.edu.sa

⁴Department of English, College of Languages and Translation King Khalid University, Abha, Kingdom of Saudi Arabia, javed@kku.edu.sa

Abstract

Artificial Intelligence (AI) has greatly changed the current state of foreign language pedagogy in such a way that both foreign language learners and teachers are no longer focusing only on traditional methods. Foreign language teachers now incorporate the utilization of AI tools in language pedagogy considerably. This study examines the perspectives of senior lecturers on the integration of AI in language pedagogy. The choice for the selection of senior lecturers is based on the fact that these relevant stakeholders possess extensive experience and skill in the field of foreign language teaching. Hence, this study focuses on how these lecturers perceive the role of technological tools in language teaching. The current study highlighted relevant notions such as increase in teachers' productivity, enhanced efficiency in language instruction, personalized learning, and increase in access in language education, amongst others, associated with the integration of these tools. On the other hand, the research employed the use of quantitative research methodology, wherein a large number of statistical data is collated, analyzed and discussed. These data for the present study were collated from as many as eighty-three (83) senior lecturers. Relevant findings which were unveiled from the data analyzed point at beneficial and challenging aspects of AI integration in language pedagogy. Based on the perceived benefits of AI tools by senior lecturers, the research participants were unequivocal on enhanced teaching methodology. Even though the majority of them confessed about not using these tools frequently in teaching, those who use them attested to improvement in language teaching, reduction of workload and enhanced language learning.

Keywords: Foreign Language Pedagogy, Artificial Intelligence (AI), Senior/ Older Lecturers, Artificial Intelligence tools, Foreign Language Teaching,

Received: 08 May 2024 **Revised:** 10 June 2024 **Accepted:** 25 June 2024

1.Introduction

Incorporation of AI tools is becoming more common in the domain of foreign language education. Nevertheless, the influx of these tools has provided majority of individuals; specifically, those who are learning foreign language to learn at ease. On the other hand, foreign language teachers also use these tools as assistants in rendering their teaching roles. AI-powered tools are computer programs that make use of artificial intelligence (AI) techniques in order to comprehend, produce, or modify human language. However, some of these techniques include deep learning, natural language processing, natural language creation and data analytics. According to Gordes & McCombe Waller (2019), the purpose of these

technologies is to enhance human abilities, provide students personalized educational experiences, and enhance the overall efficiency of educational institutions in their daily activities. Also, these instruments possess a diverse array of applications and features, making them very beneficial across a multitude of professions and businesses (Alharbi, 2023; Lv, Y 2014; Manovich, 2001; Mays et al., 2021; Sauro, 2014).

The incorporation of artificial intelligence (AI) into the field of foreign language education presents a range of potential advantages as well as obstacles. Artificial intelligence (AI)-driven solutions, such as apps for language learning, automated systems for assessment, and chatbots, have the potential to provide tailored learning experiences, improve accessibility to language education, and enhance the effectiveness of language teaching. Nonetheless, this also prompts inquiries about the responsibilities of educators, the capacity of AI to accommodate various language learning environments, and the possible constraints or disadvantages that may emerge from its use.

The primary objective of this research is to address these issues by engaging senior lecturers to articulate their perspectives on the incorporation of artificial intelligence (AI) in the domain of foreign language pedagogy. However, insights gained from these lecturers will further contribute to the proficient and ethical utilization of artificial intelligence (IA) in the domain of foreign language pedagogy.

2.Literature Review

Foreign language pedagogy involves the use of various methods, approaches, tactics, and techniques for teaching languages that are not native to the learners. This field has consistently evolved due to the influence of AI technologies. However, discussion of AI in foreign language pedagogy involves understanding of prominent themes. This section is dedicated to discussing these themes in alignment to various postulations of many scholars on AI in foreign language pedagogy.

2.1. AI in Foreign Language Pedagogy

The area of foreign language pedagogy is characterized by its dynamic and ever-changing nature as it focuses on the instruction and acquisition of languages that are not the learners' native tongues. The field of language education covers a diverse array of theoretical frameworks, instructional techniques, and pedagogical strategies that aim to assist the process of acquiring and attaining proficiency in languages that are unfamiliar to the learner. According to Lenci (2020), foreign language pedagogy is a multidisciplinary domain that incorporates principles and methodologies from several fields such as linguistics, psychology, education, and cultural studies. In order words, its primary objective is to create efficient teaching techniques and curricula for the purpose of facilitating language acquisition.

Several researchers (Woo & Choi 2021; Gulavani & Kulkarni 2022; De la Vall, & Araya 2023) have recorded prominent transformation that have manifested in this field of study. One of them is technological innovations which are brought by AI integration. The field of foreign language instruction has seen a substantial upheaval due to the emergence of technology. The integration of digital technologies and online resources has been implemented in language training, therefore providing learners the opportunity to avail themselves of online courses, language learning applications, and multimedia materials. These technology improvements also provide individualized learning opportunities and facilitate the overcoming of geographical limitations, Pokrivcakova (2019).

Meanwhile, AI integration in foreign language pedagogy involves innovative tools that are used by foreign language students for language learning and foreign language teachers for language teaching. These present the potential for a learning experience that is imbued with personalization, flexibility, inclusivity, and heightened engagement. On the other hand, Nazari et al. (2021), believe that these possess the capability to furnish educators and scholars with the necessary resources to address not only the content being acquired, but also the manner in which it is being acquired, as well as the emotional state of the student. Jiang (2022), further claims that AI technologies have the potential to facilitate the cultivation of information and abilities that are sought after by employers.

Since there is a constant influx of AI tools in language education, researchers (Kannan Munday 2018; Lim et al. 2023; Rego 2015 and Sauro 2014) have explored prevalent AI tools that both language learners and teachers found most helpful in language pedagogy. Andreevich (2023) identified prevalent AI tools used in foreign language pedagogy, such as, language learning apps, virtual language tutor, language translation software, language learning games and language assessment and evaluation software. Meanwhile, Baker & Smith (2019), categorized these tools as learner oriented, instructor-oriented, and institutional system-oriented AI tools. While learner-oriented AI tools are technologies specifically design for language learners, instructor-oriented AI tools are for language teachers to aid them for effective teaching of foreign language. The institutional system-oriented AI tools offer administrators and managers at the institutional level with vital information.

2.2. Preparing Older/Senior Lecturers on AI integration in Foreign Language Pedagogy

Even though the contribution of human language instructors is necessary for the teaching of foreign language, it is important that these instructors are equipped with the knowledge of AI-powered educational tools to make their work easier. Several prior studies (Abdelhalim, 2016; Kim, 2002; Lam, 2000; Liaw, Huang, & Chen, 2007; Russel & Bradley, 1997; Sabzian, & Gilakjani, 2013), have demonstrated that foreign language instructors generally endorse the use of AI technologies within their instructional settings. However, there is a concern on how older lecturers may need targeted assistance and instruction to effectively adapt to contemporary technology and integrate them into their pedagogical approaches.

A better approach that has proven effective as postulated by Pokrivcakova (2019) is awareness and orientation. Awareness and orientation entails raising the educators' awareness of the notion of artificial intelligence (AI) and equipping them with a foundational comprehension of the potential applications of AI in language instruction. However, this is possible by training foreign language older educators to include artificial intelligence (AI) into foreign language instruction (Schulze et al., 2016; Sadeghi & Richards, 2021). Jiang (2022) maintained that teachers who possess enough training in the use of AI technology and had favorable experiences with AI-related applications are more inclined to these tools into their respective classes. One crucial need for achieving success is to ensure that individuals are adequately equipped and possess the necessary confidence to effectively navigate and engage with settings that are improved by artificial intelligence (AI) technology, (Richards 2015).

Professional development workshops also play a crucial role in equipping older educators with the necessary skills and knowledge to effectively incorporate artificial intelligence (AI) into the domain of foreign language instruction. According to Sadeghi & Richards (2021), the primary objective of these workshops is to provide educators with the requisite knowledge, abilities, and hands-on experience to proficiently use artificial intelligence (AI) tools and technology in their instructional practices. Díaz-Maggioli (2003), claimed that professional development is a continuous and personalized process that cannot be approached with a one-time, standardized approach. Hence it involves the ongoing practice of revealing oneself professionally, reflecting on experiences, and fostering progress. However, engaging older lecturers on continuous professional enables them to remain abreast of technology changes.

Another approach that can be of help in preparing older lecturers for AI integration is progressive learning approach. Progressive learning approach denotes an educational strategy or technique that prioritizes a progressive and sequential approach to learning. According to Vogelstein et al. (2020), this approach emphasizes the methodical and step-by-step development of learners' knowledge and abilities, with a focus on building upon their current foundation. It acknowledges that the integration of artificial intelligence (AI) in language instruction is a process that needs a considerable investment of time, patience, and continuous assistance. By deconstructing the procedure into feasible stages and progressively integrating more intricate artificial intelligence (AI) instruments and tactics, older educators may acquire expertise in AI integration while maintaining a commendable level of language education.

The integration of artificial intelligence (AI) in foreign language education necessitates the inclusion of feedback and assessment in the training of older lecturers. This is of utmost importance in order to provide ongoing improvement and adaptation of their teaching techniques. With this method they are better

equipped to leverage AI technologies to improve their teaching practices and offer quality language instruction to their students. In terms of collaborative strategy, Chamberlin-Quinlisk (2010) maintained that language teachers who possess diverse degrees of expertise in the field of artificial intelligence (AI) can work together. However, participants get the opportunity to exchange valuable ideas, exemplary methodologies, and practical approaches for the seamless integration of artificial intelligence (AI) into the domain of language instruction. Other strategies that can be of help in preparing older lecturers for AI integration are incentives and recognition strategy, mentorship and coaching, interdisciplinary cooperation and peer learning and sharing.

3. Gap in the Literature

Considerable scholarly inquiry has been dedicated to investigating the ramifications of incorporating artificial intelligence (AI) into the domain of foreign language instruction. However, a discernible gap exists within the existing body of literature pertaining to the perspectives held by older lecturers who are non-native language educators in their utilization of AI-powered language resources. A huge volume of available research tends to concentrate on instructors who are younger and proficient in technology, as well as those who are native speakers of the language. However, it is crucial to comprehend the ways in which older, non-native-speaking instructors adjust to and use AI tools in language instruction, as well as the tactics they take to overcome any possible obstacles. The existence of this study gap is a valuable opportunity to investigate the distinct dynamics and requirements of this particular population within the framework of integrating artificial intelligence (AI) into foreign language instruction.

4. Research Questions

In the light of the identified gap in the literature, the following research questions were developed to guide the main goal of this study.

1. To what extent do older/senior lecturers integrate AI tools in language teaching?
2. What are the perspectives of older lecturers on the role of AI in foreign language pedagogy?
3. To what extent do older lecturers believe that these technologies can complement traditional method of language foreign language pedagogy?

5. Research Methodology

5.1. Research Approach

The current research employed the use of a quantitative research methodology in investigating the perspectives of older/senior lecturers on AI integration in foreign language pedagogy. However, using a descriptive-statistics analysis, the data generated were effectively examined. The said research data was generated using an online questionnaire. The participants who were engaged in this questionnaire were all older/senior lectures; randomly selected from a range of educational institutions, including universities, colleges, and language schools.

5.2. Study Sample

The sample for this research includes forty-six (46) male and thirty-seven (37) female older/senior lecturers who were randomly selected. However, the criteria for selecting these lecturers were mostly determined by the duration of their professional experiences and their academic qualifications. Furthermore, it is crucial to recognize that there was a notable disparity in the allocation of demographic variables, including gender, age, and years of experience, among the individuals included in the study. On the other hand, an informed consent was appropriately acquired from the participants before the data collecting process.

Table 1: Demographic Variables

Category	Variable	Frequency	Percentage
Gender	Male	46	55.42%

	Female	37	44.58%
Age	Less than 40years	9	10.84%
	41-50years	9	10.84%
	51-60years	25	30.12%
	61-70years	22	26.51%
	71+ above	18	21.69%
Academic Rank	Professor	25	30.12%
	Associate Prof.	23	27.71%
	Assistant Prof.	22	26.51%
	Lecturer	13	15.66%
Years of Experience	Less than 5years	15	18.07%
	5-10years	19	22.89%
	11-20years	31	37.35%
	More than 20years	18	21.69%

5.3. Data Collection Procedure

The research was generated through the administration of the online questionnaire among the research participants. The questionnaire consists of two main sections: first section represents the collated demographic information of the study participants, and the remaining section presenting the survey items contained in the research's questions.

However, it is worthy to note that the second section of the questionnaire is also divided into three subcategories. The first part represents the first question for the research, which seeks to investigate the extent older/senior lecturers integrate AI tools in language teaching. Nevertheless, second part includes seven (7) survey items which point at the second research question. Five (5) items were developed in tandem with the third research question and are presented in the last part of the second section. All survey items, except for the demographic data, and the first research question were designed using a 5-point Likert scale.

5.4. Method of Data Analysis

The responses from the research participants with regard to the provided survey items were evaluated using statistical tools like graphs and tables. The data collected from the questionnaire was used to determine frequencies and percentages.

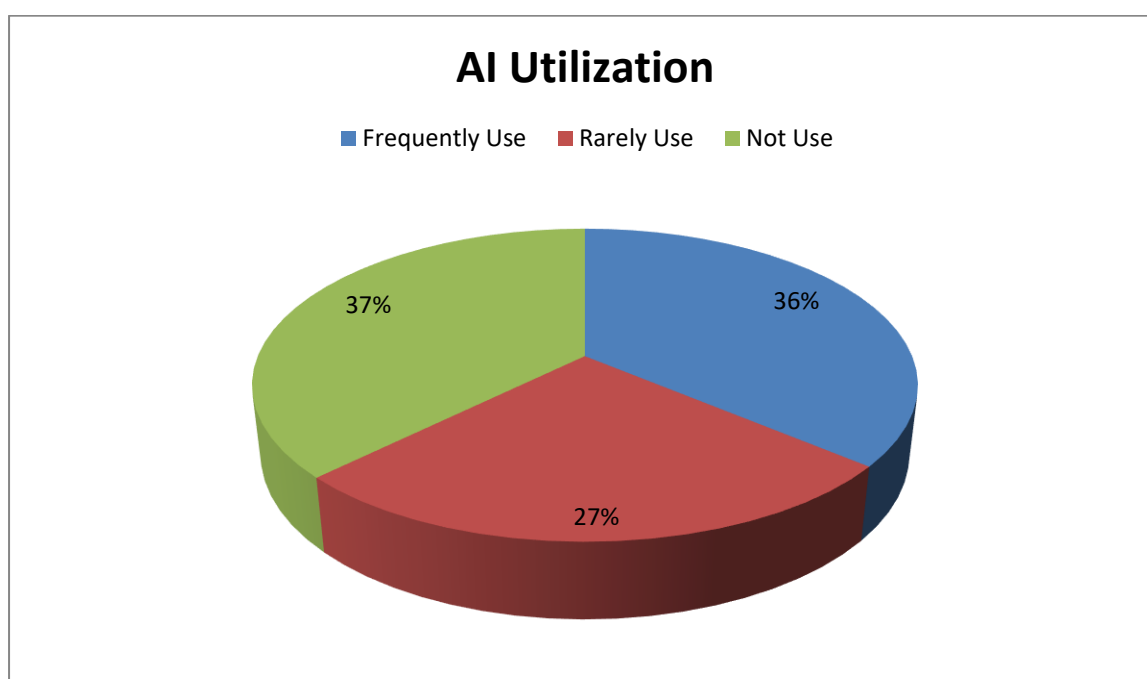
5.5. Data Presentation and Analysis

This section is dedicated to answering the identified research questions. In other words, the responses among the respondents with regards to the three research questions will be presented and evaluated. The first research question explores the extent older/senior lecturers integrate AI tools in language teaching. Below is a graphical representation of the responses on the participants.

5.6. Data Presentation

Research Question 1: To what extent do older/senior lecturers integrate AI tools in language teaching?

Figure 1: Distribution of the Responses of Older Lecturers on AI Use



The above diagram depicts the representation of the frequency in the usage of AI tools by the research participants. From the data presented, a notable proportion of the older/senior educators belong to the "Frequently Use" classification, suggesting that a substantial segment of the research participants actively and consistently integrates AI technologies into their pedagogical or professional activities. This observation indicates that there is a significant degree of familiarity and active involvement with artificial intelligence (AI) technology among this particular group.

The category of "Rarely Use" encompasses a significant proportion of the participants. Although not as widespread as frequent users, this segment suggests that a considerable proportion of older/senior lecturers demonstrate receptiveness to, or sporadically use of AI techniques, but with less frequency as compared to the former group.

Non-Adoption of AI technologies: The proportion of older /senior lecturers, up to 37%, who abstain from using AI technologies entirely, is a significant segment within this particular population. This group demonstrates a degree of reluctance or resistance towards integrating AI into their pedagogical or professional activities which may be attributable to apprehensions, a predilection for conventional approaches, or inadequate familiarity with AI technique.

Research Question 2: What are the perspectives of old lecturers on the role of AI in foreign language pedagogy?

The survey items that are contained in the above research question are listed below.

- i. Teaching and learning of foreign language are made easier with the use of AI tools.
- ii. Do these tools improve foreign language students' learning experiences?
- iii. Can the integration of these tools in foreign language learning improve language proficiency of students?
- iv. Do you encounter problem while using these tools?
- v. Workloads of language teachers are abruptly reduced with the use of AI tools.
- vi. Can age-related factor affect effective integration of AI tools by older lecturers in teaching of foreign language?
- vii. Do you believe that AI can replace human language teachers?

Table 2: Perspectives of Older Lecturers on the Role of AI in Foreign Language Pedagogy?

Survey Items	SA	A	N	SD	D	Mean	St.D
Q1	32.61%	19.57%	21.73%	17.39%	8.70%	3.93	0.94
Q2	28.26%	30.43%	19.57%	15.22%	6.52%	3.07	1.26
Q3	24.32%	32.43%	13.52%	16.22%	13.51%	3.00	1.27
Q4	21.62%	16.22%	24.32%	18.92%	18.92%	2.93	1.31
Q5	32.61%	24.32%	18.92%	8.70%	15.45%	3.24	0.88
Q6	24.32%	19.57%	18.27%	18.92%	18.92%	3.35	0.90
Q7	15.22%	10.47%	24.32%	21.73%	28.26%	3.07	1.29

SA= Strongly Agree, A= Agree, N= Neutral, SD= Strongly Disagree, D= Disagree, St.D= Standard Deviation

The above table presents the opinions of the eighty-three (83) participants on the role of artificial intelligence (AI) in foreign language pedagogy. However, the above data presentation is interpreted and summarized as follows.

i). In the first item, in terms of the role of AI in foreign language pedagogy, majority (more than 50%) of the respondents affirmed that AI tools make teaching and learning of foreign language easy. This is evident from the high mean score which is 3.93. Although, a proportion of the respondents (21.73%) maintained neutral stance, the remaining 26.09% of the participants refuted the first item.

ii). In the second item, a significant proportion of the participants express a strong consensus on the efficacy of AI tools in augmenting the learning experiences of those who learn foreign languages, hence reflecting a considerable degree of assurance in the beneficial effects of such tools on students. While approximately, 20% of the participants express a neutral stance, indicating a level of ambiguity or a need for more elucidation on the subject matter, a cumulative proportion of 21.74% of participants expressed either strong disagreement or disagreement with the aforementioned statement, suggesting the presence of a proportion that harbors skepticism about the efficacy of AI technologies in enhancing students' educational experiences. However, the calculated mean of 3.07 exhibits a somewhat elevated value, which reflects generally favorable perceptions among the participants with regards to the beneficial influence of AI technologies on the learning experiences of foreign language students. Nonetheless, the standard deviation indicates the presence of varying perspectives among the surveyed population.

iii). In the third item, a substantial proportion of the participants express a strong consensus on the potential enhancement of students' language competency via the use of artificial intelligence (AI) technologies in foreign language education. This observation suggests a strong degree of assurance about the beneficial effects of AI technologies on language competence. The mean score of 3.00 indicates a rather balanced viewpoint among the participants about the potential of artificial intelligence (AI) technologies in enhancing language ability. While there exists an optimistic perspective, there is also a significant level of cynicism. The standard deviation value of 1.27 suggests a moderate level of variability in the replies. A variety of perspectives exist, including those who hold strong affirmations or refutations, as well as others who choose a neutral stance.

iv). About the fourth item, a considerable proportion of the participants express a resolute concurrence in encountering challenges when utilizing artificial intelligence (AI) tools, thereby suggesting the existence of a subgroup that confronts noteworthy difficulties when engaging with such technological instruments. While a cumulative proportion of 37.84% of participants express either a strong dissent or a general disagreement with the aforementioned statement, thereby suggesting the existence of a proportion that does not perceive substantial difficulties or obstacles when utilizing artificial intelligence (AI) tools. The mean score of 2.93 falls slightly below the neutral threshold, suggesting a little inclination towards disagreement on the existence of issues while using AI techniques. It is widely acknowledged that this midpoint, typically assigned a value of 3, is commonly regarded as a neutral position. The aforementioned mean value implies a marginally more pessimistic sentiment, on average, with regards to the occurrence of issues when utilizing artificial intelligence (AI) tools.

v). The mean of 3.24 for the fifth item exceeds the central point of the Likert scale, often regarded as a neutral reference point (3). This observation implies a generally favorable attitude towards the use of AI technologies in alleviating teacher duties. Nonetheless, the observed standard deviation of 0.88 suggests a comparatively low level of variability in the answers, suggesting a reasonably high degree of consistency and a limited range of dispersion. This indicates that a significant proportion of participants express their views as either Strongly Agree, Agree, or Neutral, whereas a very small number of respondents fall into the Disagree and Strongly Disagree groups.

vi). For the sixth item, more than 40% of the participants express a strong consensus on the impact of age-related variables on the successful incorporation of AI tools by older/senior educators while less than 39% of them refuted this claim. This finding suggests a notable degree of assurance in the correlation between age and the integration of AI tools.

vii). The mean score of 3.07 in the seventh item exhibits a marginal deviation from the central point of the Likert scale, commonly acknowledged as the neutral reference point (3). This proposition implies a prevailing inclination towards dissent with regards to the notion of artificial intelligence (AI) replacing human language instructors. The observed standard deviation of 1.29 signifies a discernible degree of variability in the collected responses, suggesting a moderate dispersion of data points. The findings of this item capture the multifaceted perspectives surrounding the prospective involvement of artificial intelligence (AI) in supplanting human language instructors. A noteworthy contingent of respondents has voiced their reservations regarding the notion of absolute substitution.

Research Question 3: To what extent do older/senior lecturers believe that these technologies can complement traditional method of foreign language pedagogy?

The survey items that are contained in the above research question are as follows:

- i. Do you believe that AI integration is better than the traditional language teaching method?
- ii. Do you think that AI integration can enhance the effectiveness of the traditional language teaching method?
- iii. Based on your experience, do you think that AI integration can complement the traditional language teaching method?
- iv. Do you prefer the traditional method to AI integration?

Table 3: AI Integration and Traditional Language Teaching Method

Survey Item	SA	A	N	SD	D	Mean	St.D
Q1	14.46%	30.12%	9.63%	21.69%	24.10%	3.21	1.28
Q2	33.73%	18.07%	24.10%	12.05%	12.05%	3.49	1.14
Q3	24.10%	26.51%	18.07%	12.05%	19.27%	3.33	1.22
Q4	22.89%	25.30%	6.02%	24.10%	21.69%	3.02	0.98

The interpretation of the above table is summarized as follows.

i). According to the findings of the first item in this table, a notable percentage of participants demonstrate an optimistic perspective, asserting that the incorporation of artificial intelligence (AI) surpasses conventional language instruction approaches. Additionally, a discernible cohort of responders remains neutral, indicating that some individuals possess a well-rounded viewpoint. The aggregate average score suggests a mostly favorable emotion with a reasonably low level of heterogeneity in the answers.

ii). For the second item, a notable fraction of participants demonstrates an optimistic perspective, asserting that the integration of artificial intelligence (AI) has the potential to augment the efficacy of conventional language teaching approaches. Additionally, a discernible proportion of responders remain neutral, indicating that some individuals possess a well-rounded viewpoint. The mean score suggests a primarily optimistic emotion with relatively small dispersion in the participants' replies.

iii). In the third survey item, there is a high agreement among the respondents that AI integration can complement the traditional language teaching method. This is evident in the mean score which is 3.33 with relatively low standard deviation of 1.22.

iii). The fourth survey item uncovers a wide array of teaching technique preferences among older /senior lecturers. There exists a significant number of respondents that exhibits a strong or moderate preference for the conventional approach. Nevertheless, a considerable proportion of individuals have a contrasting viewpoint, expressing their willingness or inclination towards the incorporation of artificial intelligence (AI). The data has a relatively low standard deviation, indicating a high level of consistency across the replies. The majority of the respondents tend to align themselves with either agreement or disagreement. In general, the findings suggest that there exists a prevailing inclination for the conventional technique, however accompanied by a notable contingent that does not share this choice.

6.Discussion

This study examines the perspectives of older/senior lecturers on the integration of AI in language pedagogy. The choice for the selection of senior lecturers is based on th these relevant stakeholders' possession of extensive experience and skills in the field of foreign language teaching.

Meanwhile, the incorporation of artificial intelligence (AI) into the field of foreign language education presents a range of potential advantages to both foreign language teachers and students. In other words, AI tools have the potential to provide tailored learning experiences, improve accessibility to language education, and enhance the effectiveness of language teaching. Whilst these tools are supposed to help language teachers with a concern on how these older/senior educators view the utilization of these tools.

This research has engaged a number of older/senior lecturers to share their view in regard to this subject. Based on the findings of this research, older/senior lecturers acknowledged the effectiveness of these tools in both foreign language learning and teaching. Although majority of these older/senior lecturers as significant participants of the study affirmed not using these tools frequently in teaching foreign languages, those who integrate them attested to the effectiveness of these tools.

The findings reveal that AI integration makes language teaching and learning easier for teachers and learners. This finding is in tandem with that of Pokrivcakova (2019). The scholarly work claimed that AI-powered tools have the potential to provide a learning experience that is characterized by increased personalization, flexibility, inclusivity, and engagement. The use of such technologies may enable educators and students to effectively address not just the content of the learning process, but also its methodology and the emotional state of the learner.

The research participants also held positive view in terms of improvement of linguistic proficiency of language students with the use of AI tools. As put forwarded by Nazari et al. (2021), the process of acquiring a new language may propose difficulties, consume a significant amount of time, and can instill feelings of intimidation among pupils. However, the integration of AI can help to tackle these challenges, thereby enabling language students to improve their listening, speaking, reading, and writing skills.

Nevertheless, another important finding of this research points out the ability of AI tools to reduce the workloads of language teachers. As argued by Pokrivcakova (2019), AI-powered tools can consistently analyze the outputs of learner, diagnose their unique learning requirements, adapt the learning materials accordingly, and provide well-founded feedback within a matter of seconds. These roles are specifically done by teachers, but they are effortlessly performed when AI tools are involved.

Despite the numerous advantages of the utilization of AI tools, some individuals still find challenges using these tools. Akgun and Greenhow (2021), identified privacy issues of one, the challenges that are associated with the utilization of these tools. This encompasses the protection of user privacy in relation to the use of these technologies. Since users are gathered by these tools, there is concern that the information can be compromised. Another challenge identified by Pokrivcakova (2019) is the lack of knowledge on how to use these tools. However, Jiang (2022) advised that language teachers should undergo training to help them get acquainted to them.

An important challenge as identified in this research is age-related factor. Choi et al. (2023) insisted that age-related considerations are influential in the incorporation of Artificial Intelligence (AI) within the context of foreign language instruction. Meanwhile, the digital literacy and technological comfort levels of older/senior lectures may differ. Individuals who possess little knowledge and experience in the use of artificial intelligence (AI) technologies and digital platforms may encounter difficulties while attempting to adjust to language instruction approaches that are powered by AI, (Hopcan et al. 2023). On the other hand, Zhai et al. (2021), added that older/senior educators may exhibit resistance to change, especially if they have been using conventional teaching approaches for an extended period.

Additionally, the research participants shared positive views on complementing the traditional language teaching method with AI tools. The traditional pedagogical techniques in language instruction provide inherent value; nevertheless, the use of artificial intelligence (AI) technologies inside traditional methodologies may yield significant advantages for both learners and instructors. The integration of tailored learning, prompt feedback, supplementary materials, and round-the-clock accessibility makes artificial intelligence (AI) a powerful adjunct to the traditional language teaching methods.

7. Conclusion

The incorporation of artificial intelligence (AI) into the field of foreign language education involves the application of advanced technological tools by both learners and instructors to enhance language acquisition and teaching processes. By integrating AI tools, language pedagogy has the potential to offer an educational experience characterized by personalization, adaptability, inclusivity, and heightened engagement. This study, in particular, emphasizes the perspectives of senior or more experienced lecturers regarding the integration of AI in teaching. The findings align closely with a significant body of existing scholarly research. Nevertheless, the study highlights the importance of prioritizing training programs specifically designed to equip senior lecturers with the necessary skills to effectively utilize AI tools in foreign language instruction.

***Acknowledgement and Funding**

The authors extend their appreciation to the Deanship of Scientific Research and Graduate Studies at King Khalid University for funding this work through Large Group Research Project under grant number RGP2 /170/45

References

- [1] Abdelhalim, S. (2016). An interpretive inquiry into the integration of the information and communication technology tools in TEFL at Egyptian universities. *Journal of Research in Curriculum Instruction and Educational Technology*, 2(4), 145-173.
- [2] Akgun, S., & Greenhow, C. (2021). Artificial intelligence in education: Addressing ethical challenges in K-12 settings. *AI and Ethics*, 1-10.
- [3] Alharbi, W. (2023). AI in the Foreign Language Classroom: A Pedagogical Overview of Automated Writing Assistance Tools. *Education Research International*, 2023.
- [4] Andreevich, K. E. (2023). LANGUAGE LEARNING 2.0: THE ROLE OF ARTIFICIAL INTELLIGENCE IN FACILITATING SECOND LANGUAGE ACQUISITION. *Актуальные проблемы педагогики и психологии*, 4(1), 5-12.
- [5] Baker, T., Smith, L., & Anissa, N. (2019). Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges. *Retrieved May 12, 2020*
- [6] Chamberlin-Quinlisk, C. (2010). Cooperative learning as method and model in second-language teacher education. *Intercultural Education*, 21(3), 243-255.
- [7] Choi, S., Jang, Y., & Kim, H. (2023). Influence of pedagogical beliefs and perceived trust on teachers' acceptance of educational artificial intelligence tools. *International Journal of Human-Computer Interaction*, 39(4), 910-922.
- [8] De la Vall, R. R. F., & Araya, F. G. (2023). Exploring the benefits and challenges of AI-language learning tools. *Int. J. Soc. Sci. Humanit. Invent*, 10, 7569-7576.
- [9] Díaz-Maggioli, G. H. (2003). Professional development. *A Journal for the Teacher of English Outside the United States*, 2.
- [10] Gibbs, M. B. (2022). How is new technology changing job design? *IZA World of Labor*.
- [11] Gordes, K. L., & Waller, S. M. (2019). Novel partnerships for interprofessional education: A pilot education program in 3D technologies for human centered computing students and physical therapy students. *Journal of Interprofessional Education & Practice*, 15, 15-18.
- [12] Gulavani, M. S., & Kulkarni, M. A. (2022) Study of Role and Implementation of Artificial Intelligence in Higher Education.
- [13] Hopcan, S., Türkmen, G., & Polat, E. (2023). Exploring the artificial intelligence anxiety and machine learning attitudes of teacher candidates. *Education and Information Technologies*, 1-21.
- [14] Jiang, R. (2022). How does artificial intelligence empower EFL teaching and learning nowadays? A review on artificial intelligence in the EFL context. *Frontiers in Psychology*, 13, 1049401.
- [15] Kannan, J., & Munday, P. (2018). New trends in second language learning and teaching through the lens of ICT, networked learning, and artificial intelligence
- [16] Kim, H. (2002). Teachers as a barrier to technology-integrated language teaching. *English Teaching*, 57(2), 35-64.
- [17] Lai, C. (2015). Modeling teachers' influence on learners' self-directed use of technology for language learning outside the classroom. *Computers & Education*, 82, 74-83.

- [18] Lam, Y. (2000). Technophilia vs. technophobia: A preliminary look at why second-language teachers do or do not use technology in their classrooms. *Canadian modern language review*, 56(3), 389-420.
- [19] Lenci, S. (2020). Technology and language learning: from CALL to MALL. PhD. Dissertation.
- [20] Liaw, S. S., Huang, H. M., & Chen, G. D. (2007). Surveying instructor and learner attitudes toward e-learning. *Computers & education*, 49(4), 1066-1080.
- [21] Lim, W. M., Gunasekara, A., Pallant, J. L., Pallant, J. I., & Pechenkina, E. (2023). Generative AI and the future of education: Ragnarök or reformation? A paradoxical perspective from management educators. *The International Journal of Management Education*, 21(2), 100790.
- [22] Lin, C. H., Warschauer, M., & Blake, R. (2021). Language learning through social networks: Perceptions and reality. *Language Learning & Technology*, 20(1), 124-147.
- [23] Lv, Y. (2014). The Professional Development of the Foreign Language Teachers and the Professional Foreign Language Teaching Practice. *Theory & Practice in Language Studies*, 4(7).
- [24] Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design*. MIT press.
- [25] Manovich, L. (2001). *The language of new media*. MIT press.
- [26] Mays, K. K., Lei, Y., Giovanetti, R., & Katz, J. E. (2021). AI as a boss? A national US survey of predispositions governing comfort with expanded AI roles in society. *AI & SOCIETY*, 1-14
- [27] Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, 7(5).
- [28] Pokrivcakova, S. (2019). Preparing teachers for the application of AI-powered technologies in foreign language education. *Journal of Language and Cultural Education*, 7(3), 135-153.
- [29] Rego, I. D. M. S. (2015). Mobile Language Learning: How Gamification Improves the Experience. *Handbook of Mobile Teaching and Learning*, 705.
- [30] Richards, J. C. (2015). The changing face of language learning: Learning beyond the classroom. *RELC Journal*, 46(1), 5-22.
- [31] Russell, G., & Bradley, G. (1997). Teachers' computer anxiety: Implications for professional development. *Education and information Technologies*, 2, 17-30.
- [32] Sabzian, F., & Gilakjani, A. P. (2013). Teachers' attitudes about computer technology training, professional development, integration, experience, anxiety, and literacy in English language teaching and learning. *International Journal of Applied Science and Technology*, 3(1), 67-75.
- [33] Sadeghi, K., & Richards, J. C. (2021). Professional development among English language teachers: challenges and recommendations for practice. *Heliyon*, 7(9).
- [34] Sauro, S. (2014). Lessons from the fandom: Task models for technology-enhanced language learning. *Technology-mediated TBLT: Researching Technology and Tasks*. Amsterdam: John Benjamins.
- [35] Schulze, J., West, S. G., & Krumm, S. (2016). The knowledge, skills, abilities, and other characteristics required for face-to-face versus computer-mediated communication: Similar or distinct constructs? *Journal of Business and Psychology*, pp. 1-18.
- [36] Vogelstein, J. T., Helm, H. S., Mehta, R. D., Dey, J., Yang, W., Tower, B., ... & Priebe, C. E. (2020). A general approach to progressive learning. *Preprint at <https://arxiv.org/abs/2004.12908>*.
- [37] Woo, J. H., & Choi, H. (2021). Systematic review for AI-based language learning tools. *arXiv preprint arXiv:2111.04455*.
- [38] Zhai, X., Chu, X., Chai, C. S., Jong, M. S. Y., Istenic, A., Spector, M., ... & Li, Y. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. *Complexity*, 2021, 1-18.