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Investigating Students' Experiences on AI Integration in Chinese Listening Practices: A Study in Higher Education

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Abstract: This study explores students' experiences of integrating Artificial Intelligence (AI) into Chinese listening practice in higher education. The study employed a qualitative approach with an exploratory descriptive design. The participants were 55 students of the Chinese Language Education Study Program at Universitas Negeri Makassar who had used AI-based tools in Chinese listening activities. Data were collected through open-ended questionnaires and semi-structured interviews, and analyzed using thematic analysis. The findings show that students generally had positive experiences using AI as a supplementary learning tool. AI was used to practice Chinese conversations, understand pronunciation and intonation, enrich vocabulary, translate texts, and repeat listening exercises independently. Students perceived AI as helpful because it provides flexible access, rapid responses, and broader opportunities for self-paced learning. However, they also emphasized that AI cannot replace lecturers, particularly in providing contextual explanations, accurate feedback, pedagogical guidance, and meaningful academic interaction. The main challenges identified were dependence on internet access, possible misinterpretation of AI-generated responses, limited contextual understanding, and less expressive interaction. This study concludes that AI has strong potential to support Chinese listening practice when integrated through a balanced, human-centered, and student-centered learning approach.

Keywords: Artificial Intelligence; Chinese Listening Practice; Chinese Language Learning; Higher Education; Student Experience

Abstrak: *Penelitian ini bertujuan untuk mengeksplorasi pengalaman mahasiswa dalam mengintegrasikan Artificial Intelligence (AI) pada praktik menyimak Bahasa Mandarin di perguruan tinggi. Penelitian ini menggunakan pendekatan kualitatif dengan desain deskriptif eksploratif. Partisipan penelitian berjumlah 55 mahasiswa Program Studi Pendidikan Bahasa Mandarin Universitas Negeri Makassar yang telah menggunakan perangkat berbasis AI dalam aktivitas menyimak Bahasa Mandarin. Data dikumpulkan melalui kuesioner terbuka dan wawancara semi-terstruktur, kemudian dianalisis menggunakan analisis tematik. Hasil penelitian menunjukkan bahwa mahasiswa secara umum memiliki pengalaman positif dalam menggunakan AI sebagai media pendukung pembelajaran. AI digunakan untuk berlatih percakapan Bahasa Mandarin, memahami pelafalan dan intonasi, memperkaya kosakata, menerjemahkan teks, serta mengulang latihan menyimak secara mandiri. Mahasiswa menilai AI bermanfaat karena menyediakan akses yang fleksibel, respons yang cepat, dan peluang belajar mandiri yang lebih luas. Meskipun demikian, mahasiswa menegaskan bahwa AI tidak dapat menggantikan peran dosen, khususnya dalam memberikan penjelasan kontekstual, umpan balik yang akurat, bimbingan pedagogis, dan interaksi akademik yang bermakna. Tantangan utama yang ditemukan meliputi ketergantungan pada akses internet, kemungkinan salah tafsir terhadap respons AI, keterbatasan pemahaman konteks, dan interaksi yang kurang ekspresif. Penelitian ini menyimpulkan bahwa AI memiliki potensi yang kuat untuk mendukung praktik menyimak Bahasa Mandarin apabila diintegrasikan melalui pendekatan pembelajaran yang seimbang, humanis, dan berpusat pada mahasiswa.*

Kata Kunci: *Artificial Intelligence; Praktik Menyimak Bahasa Mandarin; Pembelajaran Bahasa Mandarin; Pendidikan Tinggi; Pengalaman Mahasiswa*

Introduction

The development of digital technology in the era of the Industrial Revolution 4.0 and Society 5.0 has driven a major transformation in the world of education, including in the learning of foreign languages in universities. One of the fastest growing technological innovations is Artificial Intelligence (AI), which is now not only being used in the industrial and business sectors, but is also beginning to be integrated into modern learning practices. The presence of AI allows for the creation of a more adaptive, interactive, personalized, and flexible learning environment that meet the needs of students. In the context of higher education, AI is used to help the learning process through intelligent tutoring systems, automated feedback, natural language processing, and conversational AI that is able to simulate human communication naturally. The integration of AI in education is seen as part of the transformation of digital pedagogy that supports 21st-century learning, particularly in improving student engagement, self-paced learning, and accessibility of technology-based education (Holmes et al., 2019; Kasneci et al., 2023; Zawacki-Richter et al., 2019).

The development of AI in foreign language education shows an increasingly significant trend since the emergence of generative AI technologies such as ChatGPT, Gemini, and various other AI-powered language platforms. This technology presents a paradigm shift in language learning because it allows students to have a more communicative and responsive learning experience compared to previous conventional learning technologies. AI is now able to generate text, voice, conversation simulations, grammar corrections, and pronunciation feedback automatically and in real-time. In learning foreign languages, AI is considered to be able to help students enhancing listening, speaking, reading, and writing skills more independently through personalized learning experiences that are difficult to realize in traditional learning (Kohnke et al., 2023; Tlili et al., 2023). In addition, AI is also considered to be able to increase student learning motivation because it provides a more flexible, less monotonous learning environment, and allows language practice to be done anytime and anywhere (Chen et al., 2020; W. Huang et al., 2022).

In the context of learning a foreign language, listening skills are one of the basic skills that have a high level of complexity. Listening is not only related to the ability to hear the sounds of language, but also includes the ability to understand the meaning, context, intonation, pronunciation, and interpretation of the message conveyed by the speaker (Rost, 2011). Therefore, listening learning requires intensive practice, repetition, and continuous language exposure so that students are able to understand the target language optimally. Unfortunately, listening learning in college still often faces various obstacles, such as limited audio media, lack of authentic interaction, limited practice time in class, and lack of individual feedback on student mistakes (Vandergrift & Goh, 2012). This condition causes students to have difficulties in improving their listening skills, especially in foreign languages that have complex phonological characteristics such as Chinese.

Chinese is one of the international languages that is increasingly important to learn in the era of globalization due to the influence of Chinese economy, culture, and diplomacy that continues to grow at the global level. In Indonesia, interest in learning Chinese has also increased significantly, especially in universities that open Chinese Language Education Study Programs. However, learning Chinese has its own challenges because the characteristics of this language are different from Indonesian and other foreign languages. One of the biggest

challenges lies in listening skills (tīnglì), especially in understanding the pronunciation of native speakers, distinguishing tones, understanding intonation, and capturing the meaning of speech in the context of fast and authentic communication (Everson & Shen, 2010). Students who learn Chinese often have difficulty distinguishing the four main tones that greatly determine the meaning of words in Chinese. Misunderstanding the tone can lead to misinterpretation of the overall meaning.

Problems in Chinese listening practices show the need for learning innovations that are able to help students get a more effective and interactive learning experience. In recent years, AI has begun to be used as a listening learning medium through various speech recognition-based applications, AI chatbots, intelligent voice assistants, text-to-speech, and conversational AI. This technology allows students to practice listening independently with access to more flexible and varied audio materials. AI also allows students to obtain immediate feedback on pronunciation and understanding of the context of the language learned. The presence of AI in listening learning is considered to be able to overcome some of the limitations of traditional learning because students can repeat exercises freely according to their individual needs (Godwin-Jones, 2018; S. Huang, 2025).

Various international studies show that AI has great potential in improving the effectiveness of foreign language learning. Research by (Kohnke et al., 2023) found that the use of ChatGPT in language learning can increase student learning motivation and interaction in foreign language learning activities. Another research by (Lo, 2023) showed that menunjukkan bahwa Generative AI helps students gain a more personalized learning experience through the provision of automated feedback and language exercises based on individual needs. In addition, a systematic review conducted by (Tlili et al., 2023) emphasized that the integration of AI in language education contributes to increase student engagement, self-directed learning, and student language skill. On the other hand, (W. Huang et al., 2022) also found that the use of AI chatbots in foreign language learning is able to increase students' confidence in the target language communication practices.

In the context of listening skills, several studies have shown that AI can help students improve their ability to understand foreign language pronunciation and intonation more effectively. Speech recognition technology allows students to get automatic correction of pronunciation errors, while conversational AI can help students understand language through authentic communication simulations. Research by (Moorhouse & Wong, 2025) shows that the use of AI-assisted listening tools has a positive influence on students' listening comprehension because students gain access to more intensive and contextual practice. Meanwhile, another study found that AI listening applications help students to improve their ability in understanding the accent, intonation, and speaking speed of native speakers in the target language (W. Huang et al., 2022). This shows that AI has the potential to be an innovative alternative in learning Chinese listening in higher education.

In the Indonesian context, scholarly interest in the integration of artificial intelligence (AI) into foreign language education has grown substantially in recent years, driven by the widespread adoption of digital technologies in higher education institutions. Existing studies indicate that students generally perceive AI-assisted language learning positively, as it contributes to increased learning motivation, improved accessibility to learning resources, and greater flexibility in the learning process. Research by

Rahmawati et al. (2024) found that the use of ChatGPT in learning foreign languages helps students acquire ideas, understand material, and conduct language exercises more independently. Other research by (Du & Alm, 2024; Van Horn, 2024) shows that the integration of AI in digital-based listening learning is able to increase student involvement in language learning activities. In addition, a study by (Liu & Ma, 2024; Xiao & Zhi, 2023) revealed that students feel that AI provides convenience in pronunciation and listening practice because it can be used flexibly without space and time limitations.

However, previous studies still show some limitations. First, AI research in foreign language learning is still dominated by the context of English as a Foreign Language (EFL), while research on Chinese learning is still relatively limited. Second, most studies focus more on writing, grammar, and speaking skills than listening skills. Third, previous research has generally focused on the effectiveness of AI on learning outcomes, while students' experiences in using AI as a listening practice assistance have not been explored in depth. Meanwhile, student experience is an important aspect to understand because it relates to how students use AI, the reasons for use, the form of listening activities carried out, the perception of the effectiveness of AI compared to conventional methods, and the challenges they face during the AI-based learning process (Chan & Hu, 2023).

Moreover, research on the integration of artificial intelligence (AI) in Chinese listening practice within the Indonesian context remains limited, particularly among students enrolled in Chinese Language Education programs. To date, few studies have specifically explored the experiences of Chinese Language Education students in utilizing AI-assisted technologies for listening practice in Indonesian higher education settings. Indeed, the experiences of Indonesian learners of Chinese as a foreign language are likely to differ from those documented in international studies due to variations in cultural, linguistic, and educational contexts. Such contextual differences may shape students' perceptions, patterns of technology use, and challenges in adopting AI-assisted learning tools. Therefore, this study addresses an important research gap by providing empirical evidence on how Chinese Language Education students experience the use of AI in listening practice. The findings are expected to contribute not only to the literature on AI-assisted language learning but also to the development of more effective technology-enhanced Chinese language instruction in Indonesian higher education.

This study offers a novel contribution by specifically examining the experiences of students enrolled in the Chinese Language Education Program, Department of Foreign Languages, Faculty of Languages and Literature, State University of Makassar, in utilizing artificial intelligence (AI) for Chinese listening practice. Unlike previous studies that primarily focused on the effectiveness of AI technologies, this research provides a more comprehensive exploration of students' experiences by investigating multiple dimensions, including the frequency of AI use, students' motivations for adopting AI tools, the types of listening activities conducted, perceptions of AI effectiveness in comparison with conventional learning methods, as well as the perceived advantages and challenges associated with AI-assisted Chinese listening learning.

Furthermore, the findings of this study are expected to provide valuable insights for the development of innovative, human-centered, and adaptive AI-assisted Chinese language learning strategies. Such insights may support educators in designing learning environments that effectively combine

technological advancements with pedagogical principles to enhance students' learning experiences and outcomes. In addition, this study seeks to contribute to the growing body of literature on AI-assisted language learning in Indonesia, particularly within the field of Chinese language education, which remains relatively underexplored compared to English language learning contexts. By addressing this gap, the study offers both theoretical and practical implications for the integration of AI in foreign language education and provides a foundation for future research in this emerging area. The research questions in this study are:

1. How do the students in Chinese Language Education Program experience the use of Artificial Intelligence (AI) in Chinese listening practice?
2. How do the students perceive the effectiveness of AI-assisted Chinese listening practice compared to conventional learning methods?
3. What advantages and challenges do students identify in the use of AI for Chinese listening practice in higher education?

Method

This study uses a qualitative approach with an exploratory descriptive research design. The qualitative approach was chosen because this study aims to deeply understand students' experiences in the use of Artificial Intelligence (AI) in Chinese listening practices in higher education context. Exploratory descriptive design is used to describe students' perceptions, experiences, and views on the integration of AI in Chinese listening learning in a contextual and natural manner. Exploratory descriptive research allows researchers to explore relatively new phenomena and gain an in-depth understanding of the research subject's experience through systematic data interpretation (Creswell, 2017; Merriam & Tisdell, 2016).

The research was carried out in the even semester of the 2024/2025 academic year at the Chinese Language Education Study Program, Department of Foreign Languages, Faculty of Languages and Literature, State University of Makassar. The research subjects are active students of the Chinese Language Education Study Program who have used AI-based technology, such as ChatGPT, AI voice tools, speech recognition applications, or other AI platforms in Chinese listening practices. The sample is chosen using purposive sampling technique with the following criteria: (1) active students of the Chinese Language Education Study Program; (2) have used AI in Chinese listening exercises; and (3) willing to be a research respondent. The number of participants in this study was 55 students.

The research data was collected through questionnaire that covers several aspects, namely the intensity of AI use, the reason for using AI, the form of AI-based listening exercises, the perception of the effectiveness of AI compared to conventional methods, and the advantages and disadvantages of using AI in Chinese listening practices. The researcher also conducted an interview with several respondents to strengthen the research data from the questionnaire.

The research procedure is carried out in several stages. The first stage is the preparation of research instruments based on literature review related to AI-assisted language learning and Chinese listening learning. The second stage is the distribution of questionnaires to students by sending the link of google form containg the questionnaire. The third stage was to collect and group data based on themes that emerged from the respondents' answers. The fourth stage was doing interview with several students. The last stage is data analysis and interpretation to obtain an overview of students'

experiences in the use of AI in Chinese listening practices.

This research uses thematic analysis developed by (Braun & Clarke, 2006). Thematic analysis is used to identify, analyze, and interpret patterns or themes that emerge from research data in a systematic manner. The analysis process is carried out through several stages, namely data familiarization, coding, theme search, theme review, theme naming, and drawing conclusions (Braun & Clarke, 2006; Nowell et al., 2017). The data obtained was analyzed by identifying patterns and tendencies of students' answers related to the use of AI in Chinese listening exercises. The validity of the data is carried out through triangulation of sources and re-examination of respondents' answers to ensure the consistency of the research data. The results of the analysis were then interpreted descriptively to answer the formulation of research problems regarding students' experiences of AI integration in Chinese listening practices in higher education.

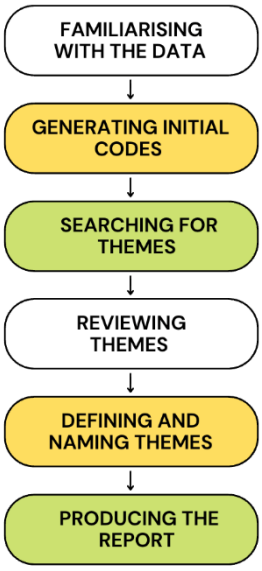

Figure 1. Data Analysis Techniques *(Braun & Clarke, 2006)*

Result and Discussion

This study involved 55 students from the Chinese Language Education Study Program, Department of Foreign Languages Education, Faculty of Languages and Literature, Universitas Negeri Makassar, who had used Artificial Intelligence (AI) in Chinese language learning activities. All respondents reported that they had used AI to support their learning, particularly in Chinese listening practice. The most frequently used AI platform was ChatGPT, followed by Gemini, Google AI, DeepSeek, Duolingo, and other AI-based applications. These findings indicate that AI has become increasingly familiar to students and has begun to function as a supplementary learning resource in foreign language learning.

Students' Experiences in Using AI in Chinese Listening Practice

The findings reveal a substantial level of engagement with AI-assisted learning tools among the participants. Nearly half of the respondents, 26 students or 47.3%, reported that they often used AI in Chinese listening practice. Meanwhile, 18 students or 32.7% stated that they sometimes used AI, and 11 students or 20.0% reported that they rarely used AI. This distribution suggests that AI has been increasingly integrated into students' learning routines and has become an important supplementary resource for supporting Chinese listening skill development.

Table 1. *Intensity of AI Use*

Frequency of Use	Total	Percentage
Often	26	47,3%
Sometimes	18	32,7%
Rare	11	20,0%
Total	**55**	**100%**

Based on the questionnaire data, ease of access was the main reason students used AI in Chinese listening practice. A total of 29 respondents or 52.7% stated that AI was easily accessible anytime and anywhere. Other reasons included its practicality, flexibility, responsiveness, attractiveness, and ability to make learning less monotonous. Students used AI for various listening activities, such as listening to Chinese conversations, repeating pronunciation, understanding conversational contexts, translating Chinese song lyrics, practicing vocabulary comprehension, and simulating dialogues.

The interview data also indicate that students used AI as an independent learning partner outside the classroom. R2 stated, "I often use ChatGPT to learn the examples of Chinese conversations and listen to their pronunciation to make it easier to understand the listening material." Similarly, R7 stated, "AI helps me practice at any time without having to wait for a college meeting." These responses suggest that AI provides additional learning opportunities beyond formal classroom sessions and enables students to manage their own learning time more flexibly.

These findings show that AI has become part of students' learning activities in Chinese language learning. The relatively high frequency of AI use indicates that students view this technology as an accessible learning resource that is relevant to the needs of today's digital generation. This finding is in line with Zawacki-Richter et al. (2019), who explain that AI can improve learning accessibility and support independent learning. Similarly, Kasneci et al. (2023) argue that students tend to use AI because it provides quick, adaptive, and personalized learning assistance.

This finding is also consistent with Lo (2023), who found that students perceive generative AI as a flexible learning tool that is responsive to individual learning needs. In the context of language learning, AI allows students to gain more intensive language exposure than conventional learning, which is often limited by classroom time. Therefore, AI can help students extend their Chinese listening practice through repeated exposure, immediate access to materials, and self-paced learning activities.

Students' Perceptions of the Effectiveness of AI in Chinese Listening Practice

Most respondents expressed positive perceptions of the effectiveness of AI in supporting the development of their Chinese listening skills. As shown in Table 2, 40 students or 72.7% stated that AI was helpful, while three students or 5.5% considered it moderately helpful. Meanwhile, nine students or 16.3% reported that AI was less helpful, and three students or 5.5% stated that it was not helpful. These findings suggest that most students perceived AI as beneficial, particularly in helping them understand pronunciation, intonation, and conversational meaning through repeated and flexible practice.

Table 2. *Students' Perceptions of AI Assistance*

Response	Total	Percentage
Helpful	40	72.7%
Moderately helpful	3	5.5%
Less helpful	9	16.3%
Not helpful	3	5.5%
Total	**55**	**100%**

The findings further indicate that a substantial majority of respondents perceived AI as beneficial in improving

their understanding of Chinese pronunciation and intonation. AI-assisted learning tools provide valuable support for listening skill development by offering repeated exposure to language input and opportunities for individualized practice. Nevertheless, several students also emphasized that AI has not yet been able to fully replace lecturer-guided instruction, particularly in providing contextual explanations, pedagogical guidance, and personalized feedback that are more sensitive to students' learning difficulties.

This perspective is further reflected in the comparative data on AI-assisted and conventional listening practice. Although AI was generally perceived as effective in increasing learning accessibility and practice opportunities, conventional lecturer-guided instruction remained highly valued for its pedagogical and interpersonal dimensions. Consequently, the findings suggest that a balanced integration of AI and traditional teaching approaches may offer a more effective framework for supporting Chinese listening development in higher education.

Table 3. *Comparison of AI and Conventional Methods*

Choice	Total	Percentage
Lecturer/ Conventional Media	44	80,0%
Balanced	11	20,0%
AI	0	0%
Total	**55**	**100%**

Although most students acknowledged the benefits of AI, 44 respondents or 80.0% still considered lecturer-guided instruction and conventional media to be more effective than AI, while 11 respondents or 20.0% preferred a balanced combination of AI and conventional learning. None of the respondents considered AI alone to be more effective. This finding shows that students position AI as a complementary learning tool rather than a replacement for lecturers.

The interview data support this interpretation. R5 stated, "AI helps understand pronunciation, but lecturers' explanations are still easier to understand because I can ask questions directly." Similarly, R3 noted, "AI is great for self-paced exercise, but lecturers better understand students' learning needs." These responses reveal that although AI can facilitate independent practice, students still need direct interaction with lecturers to clarify meaning, ask questions, and receive contextual explanations.

These findings show that AI is viewed as a complementary learning tool rather than a substitute for lecturers. Although AI offers several advantages, including flexibility, accessibility, and immediate feedback, students continue to recognize the importance of lecturers in providing pedagogical guidance, contextualized explanations, and meaningful interpersonal interaction. This indicates that the role of AI in language learning should be understood as supporting and enhancing the learning process rather than replacing human instruction.

These results align with Holmes et al. (2019), who argue that the educational value of AI lies in its capacity to augment human teaching rather than replace it. According to their framework, AI should be integrated as a pedagogical support tool that empowers both learners and educators while preserving the central role of human agency in teaching and learning. This finding is also in line with Tlili et al. (2023), who state that AI can improve personalized learning but still has limitations in providing emotional and pedagogical support that is usually offered by teachers or lecturers.

In Chinese language learning, the role of lecturers remains particularly important because Chinese has complex phonological characteristics, especially in relation to tone. Students need direct guidance to understand pronunciation nuances that may not always be detected or explained accurately by AI. These findings are supported by Godwin-Jones (2018), who explains that AI technology can improve language practice, but successful language learning is still strongly influenced by human interaction, instructional design, and pedagogical mediation.

The Advantages and Drawbacks of Using AI in Chinese Listening Practice

The analysis of open-ended responses revealed several key advantages of AI in Chinese listening practice. The most frequently mentioned advantage was ease of access, followed by quick responses, flexible use, support for finding references, opportunities to repeat exercises, and practical efficiency. These advantages indicate that AI provides students with more flexible learning opportunities beyond classroom limitations.

Table 4. *AI Advantages Theme*

Theme	Frequency
Easily accessible	29
Quick answers	22
Can be used at any time	18
Help find references	13
Can repeat exercises	13
Practical and efficient	11

The respondents stated that AI helped them obtain listening materials quickly and flexibly. R4 stated, "AI can provide answers faster than searching on its own." Meanwhile, R9 stated, "I can repeat the exercise many times until I understand the conversation." These responses suggest that AI supports independent learning by allowing students to control the pace, frequency, and focus of their listening practice.

These findings show that the main advantages of AI lie in flexibility, accessibility, and speed in providing learning resources. AI enables students to practice listening outside the classroom and repeat materials based on their individual needs. This is particularly relevant in Chinese listening practice, where students often need repeated exposure to pronunciation, tones, intonation, and natural speech patterns. Through AI-supported tools such as text-to-speech, speech recognition, and conversational AI, students can obtain additional listening input that may not always be available in conventional classroom settings.

The results are consistent with Kohnke et al. (2023), who found that students use AI because of its ability to provide instant feedback and support independent language learning. In addition, W. Huang et al. (2022) show that AI can increase language learning motivation because it allows students to practice repeatedly without social pressure. In the context of Chinese listening practice, this repeated exposure is important because students need sufficient opportunities to recognize tones, distinguish similar sounds, and understand the meaning of utterances in context.

Despite these advantages, students also identified several challenges in using AI. The most common challenge was dependence on internet access, followed by possible misinterpretation of answers, limited contextual understanding, inability to replace lecturers, and less expressive interaction. These challenges indicate that although AI can support learning flexibility, its effectiveness remains influenced by technological infrastructure,

the accuracy of AI responses, and the need for human pedagogical guidance.

Table 5. *AI Challenges Theme*

Theme	Frequency
Internet dependence	25
Misinterpretation of answers	19
Lack of understanding of context	15
Unable to replace lecturers	15
Less expressive	7

The interview data further illustrate these limitations. R8 stated, "Sometimes the AI misunderstands the questions I enter." R13 also stated, "If the internet network is unstable, AI is difficult to use." These statements indicate that AI-assisted learning is not free from technical and pedagogical constraints. Internet instability may reduce students' access to AI tools, while inaccurate or contextually inappropriate responses may lead to misunderstanding, especially when students rely on AI without further clarification from lecturers.

The findings of this study also show that AI has limitations in understanding deeper learning contexts. Although AI can generate responses quickly, its answers are not always fully accurate, context-sensitive, or pedagogically appropriate. This finding is in line with Chan & Hu (2023), who state that AI still has limitations in understanding complex learning contexts and may produce responses that are not always reliable. Therefore, students need digital literacy and academic guidance to evaluate AI-generated responses critically.

Furthermore, the results of this study confirm that the success of AI integration in education is not only determined by technological sophistication but also by the quality of pedagogical design that supports its use. AI needs to be positioned as a learning tool that complements the role of lecturers, not as a replacement. These findings are supported by Chen et al. (2020) and Xu & Ouyang (2022), who emphasize the importance of a human-centered approach to AI in education, where technology and educators work synergistically to improve the quality of learning.

Overall, the findings indicate that students had relatively positive experiences using AI for Chinese listening practice. AI was perceived as useful in supporting pronunciation and intonation comprehension, providing flexible access to learning materials, and enabling repeated practice. However, students still considered lecturer-guided instruction essential because lecturers provide contextual explanation, direct feedback, emotional support, and pedagogical interaction that AI cannot fully offer. Thus, the integration of AI in Chinese listening practice should be designed as a blended and human-centered learning approach that combines the strengths of AI technology with the pedagogical expertise of lecturers.

The main contribution of these findings lies in showing how AI is experienced by Chinese Language Education students in the Indonesian higher education context. While previous studies on AI-assisted language learning have mostly focused on English language learning or general language skills, this study highlights the specific role of AI in Chinese listening practice. The findings suggest that AI can support students' independent listening practice, but its use must be accompanied by lecturer guidance, critical digital literacy, and contextually appropriate learning design. Therefore, AI integration in Chinese listening learning should not be understood merely as technological

adoption, but as a pedagogical strategy that requires careful alignment between learning objectives, student needs, and human instruction.

Conclusion

This study concludes that the integration of Artificial Intelligence (AI) in Chinese listening practice received generally positive responses from students of the Chinese Language Education Study Program. Students used AI as a supplementary learning tool to support various listening activities, including practicing Chinese conversations, understanding pronunciation and intonation, identifying conversational contexts, enriching vocabulary, and repeating listening exercises independently. The findings indicate that AI provides flexible access, quick responses, and broader opportunities for self-paced learning beyond classroom limitations.

Although AI was perceived as helpful in improving students' Chinese listening practice, the findings also show that it cannot replace the role of lecturers. Students still considered lecturer-guided instruction essential for providing contextual explanations, accurate feedback, pedagogical guidance, and meaningful academic interaction. Therefore, AI should be positioned as a complementary learning medium that strengthens, rather than substitutes, the teaching and learning process.

The study also reveals several challenges in AI-assisted Chinese listening practice, particularly dependence on internet access, possible misinterpretation of AI-generated responses, limited contextual understanding, and less expressive interaction. These challenges suggest that effective AI integration requires not only technological access but also appropriate pedagogical design, lecturer supervision, and students' critical digital literacy. Thus, AI has strong potential to support Chinese listening instruction in higher education when it is integrated through a balanced, human-centered, and student-centered learning approach.

Future research is recommended to involve a larger and more diverse group of participants and to examine the impact of AI-assisted learning on measurable improvements in Chinese listening proficiency. Further studies may also compare different AI platforms or develop instructional models that integrate AI tools with lecturer-guided listening activities.

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