# Language Related Research E-ISSN: 2383-0816 https://lrr.modares.ac.ir https://doi.org/10.48311/LRR.16.5.4 https://lrr.modares.ac.ir/article-14-76622-fa.html



Vol. 16, No. 5 pp. 93-124 November & **December** 2025

# **Exploring EFL Teachers' Motivation and Influential Factors in Adopting AI for Language Teaching**



Areej Radhi Alruwaili<sup>1</sup>\* D, Zhila Kianfar D, & Mostafa Azari Noughabi



#### **Abstract**

Accepted: 1 January 2025

Received in revised form: 11 December 2024

Received: 26 July 2024

The integration of AI in educational contexts has been a heated debate among scholars. Despite the important role of Artificial Intelligence (AI) in foreign language education, exploring English as a foreign language (EFL) teachers' voices regarding their motivation to use AI in foreign language education has received scant attention. Therefore, this study explores the motivational factors influencing the adoption of AI in foreign language teaching through the lens of self-determination theory (SDT). Qualitative data were collected through semi-structured interviews from six EFL teachers in the context of Saudi Arabia. The study identified several key sub-themes within the broader motivational factors of relatedness, autonomy, and competence from the SDT framework. Regarding competence, participants emphasized the role of AI in enhancing their ability to deliver personalized instruction and manage their classrooms more efficiently. For relatedness, the sub-theme of mutual support and community building emerged as crucial, highlighting the importance of collaboration between teachers and students in AI adoption. In the context of autonomy, self-initiated professional development was prominent, reflecting teachers' active efforts to stay updated on AI technologies. Teachers felt that mastering AI

<sup>&</sup>lt;sup>1</sup> Corresponding Author: Department of English Language, College of Arts, Jouf University, Saudi Arabia; ORCID: https://orcid.org/0000-0001-8891-113X; Email: aralrowaili@ju.edu.sa

<sup>&</sup>lt;sup>2</sup> Department of English Language and Literature, Allameh Tabataba'i University, Tehran, Iran; ORCID: https://orcid.org/0000-0003-4947-9828

Department of English Language and Literature, Hakim Sabzevari University, Sabzevar, Iran; ORCID: https://orcid.org/0000-0002-7052-4753

[ DOI: 10.48311/LRR.16.5.4 ]

tools not only improved their competence but also enabled them to adapt AI-based solutions to meet students' individual needs. However, they also noted the challenge of ensuring that AI tools complement rather than replace critical pedagogical skills, highlighting the need to maintain a balance between using AI for efficiency and preserving essential human elements like creativity and critical thinking.

Keywords: artificial intelligence, foreign language teaching, selfdetermination theory, EFL teachers.

#### 1. Introduction

The integration of Artificial Intelligence (AI) in the context of foreign language teaching has become a prominent field of study aiming at improve language learning experiences (Chen et al., 2025; Mohamed, 2024). Comprehending the driving factors behind the adoption of AI in the context of language learning and teaching can play a significant role in developing effective strategies and maximizing the benefits of these technologies in language education (Derakhshan et al., 2024; Zheng et al., 2024). The interactive nature of AI applications can reduce language learning anxiety and enhance engagement (Derakhshan & Ghiasvand, 2024; Xin & Derakhshan, 2025), thereby reinforcing learners' intrinsic motivation to acquire new language skills (Chen, 2024; Derakhshan, 2025). Recent studies also highlight that AI technologies can provide teachers with innovative tools that enhance instructional strategies and facilitate personalized learning experiences for students.

AI applications can automate administrative tasks, offer real-time feedback, and provide tailored resources that cater to diverse student needs (Zheng et al., 2024). Such capabilities empower teachers to focus more on fostering meaningful interactions with their students (Mohamed, 2024). Moreover, teachers who employ AI tools report heightened job satisfaction and a greater sense of efficacy, as these technologies support their pedagogical goals and help address the challenges of traditional language instruction (Chiu et al., 2023). The engaging characteristics of AI applications can also promote a collaborative learning atmosphere, enhancing teachers' relatedness with their students and contributing to a more positive teaching experience (Mohamed, 2024).

Recent studies have illuminated the multifaceted aspects of motivation in the context of AI-assisted language teaching (Ebadi & Amini, 2022; Song & Song, 2023; Wei, 2023). Teachers' motivation to incorporate AI tools is often driven by the perceived potential for improved learning outcomes and increased student engagement (Collie & Martin, 2024). This aligns with self-determination theory (SDT), which posits that intrinsic motivation is fostered when individuals experience competence, autonomy, and relatedness in their activities (Reeve, 2012). In the context of AI-assisted language teaching, these components can be improved through

experiences and real-time feedback mechanisms. SDT posits that fulfilling the basic psychological needs of autonomy, competence, and relatedness is essential for fostering intrinsic motivation (Ryan & Deci, 2017) which is particularly relevant in the context of AI-assisted language learning.

In spite of the proliferation of studies on AI-language learning, exploring the motivational drives of English as a Foreign Language (EFL) teachers who are inclined toward AI language teaching has received relatively little attention (Mohamed, 2024). Examining the driving factors behind the employing of AI in foreign language teaching through the lens of SDT can yield important valuable insights into how technology can enhance learner engagement, effective language learning, and fruitful language teaching. Grasping these motivations not only informs educational practices but also guides the development of more effective AI tools tailored to meet the diverse needs of language learners. The motivation to use AI in foreign language teaching is shaped by a combination of technological affordances, pedagogical considerations, and individual and institutional factors. As the field continues to evolve, further research is needed to explore how these motivational factors influence the motivation to effectively implement AI in language teaching.

#### 2. Literature Review

#### 2.1. Self-Determination Theory (SDT)

Self-Determination Theory (SDT) asserts that satisfying the fundamental psychological needs of autonomy, competence, and relatedness is crucial for promoting intrinsic motivation (Ryan & Deci, 2017). As a widely established theory of motivation, SDT is applicable to foreign language education due to its universal scope and approach (Derakhshan & Azari Noughabi, 2024; McEown & Oga-Baldwin, 2019; Reeve, 2012; Ryan & Deci, 2017). Since the late 1990s, research has repeatedly shown that SDT provides valuable insights into the motivation behind language acquisition in formal educational contexts (Oga-Baldwin et al., 2017). Within the realm of EFL teaching, the concept of SDT holds particular importance. By establishing environments that promote autonomy and provide teachers with a sense of empowerment and competence, educational institutions can enhance the

motivation levels of EFL teachers. This, in turn, can result in greater teaching effectiveness and enhanced learning experiences for students (McEown & Oga-Baldwin, 2019).

SDT opposes behaviorist approaches by placing emphasis on intrinsic motivation (Deci & Ryan, 1985) which refers to one's engagement in doing activities for the personal enjoyment they experience (Ryan & Deci, 2012). Intrinsic motivation is associated with curiosity, exploration, creativity, and mental well-being (Deci & Ryan, 2012; Núñez et al., 2014). SDT suggests that intrinsic motivation is strongest when individuals have the freedom to make choices and have control over their actions. This concept forms the foundation of autonomy-supportive instruction and language pedagogy. The idea differentiates between intrinsic and extrinsic motivation on a spectrum, stating that integrated extrinsic motivations are in line with self-concept and personal goals, similar to intrinsic motivation (Vallerand & Ratelle, 2002). Autonomous motivation, which includes intrinsic and integrated extrinsic motivation, is different from controlled motivation, which arises from external pressures (Deci & Ryan, 2012). While intrinsic motivation is commonly believed to be unaffected by external rewards, SDT contends that creating conditions that promote autonomy, competence, and relatedness can boost motivation.

Autonomy pertains to the necessity for individuals to experience a sense of control over their actions and decisions. Within the domain of AI in language education, this may entail teachers gaining a sense of empowerment to customize AI tools according to their teaching approaches and the specific requirements of their students. Competence encompasses the need to feel proficient and capable in one's endeavors, a demand that AI tools likely fulfill by offering tailored feedback and resources that improve teaching effectiveness. Relatedness refers to the innate desire to establish connections with people. This can be fostered by employing AI systems that promote collaborative learning and facilitate interaction between teachers and learners. By examining how AI tools fulfill the psychological requirements of autonomy, competence, and relatedness, we can obtain valuable insights on the inherent motivation of teachers who utilize these tools.

#### 2.2. Artificial Intelligence in Teaching

Artificial Intelligence (AI) is revolutionizing the worldwide environment and is anticipated to impact all significant facets of human existence in the future (Bhutoria, 2022). The incorporation of AI in education signifies a major change, ushering in a new era of teaching and learning methods (Walter, 2024). Education systems globally are shifting towards a curriculum that is more personalized, technologically advanced, and focused on the needs and interests of students (Bhutoria, 2022). AI has recently caught the attention of teachers because to its current technological advancements (Ng et al., 2023).

There is currently no agreement on a universal definition of AI, and the explanations provided by experts vary (Russell & Norvig, 2016). Due to the ongoing changes in the field of AI and the interdisciplinary nature of its research, it is difficult to come up with a common definition. AI typically refers to the capacity of a computer or machine to imitate the cognitive capacities of the human brain, such as acquiring knowledge from examples and past encounters, identifying things, comprehending and reacting to language, forming judgments, and resolving complex issues (Russell & Norvig, 2016). In educational contexts, AI refers to the use of computers and software to develop systems that can adjust to the individual requirements of students, offer customized learning experiences, and aid teachers in pedagogical activities such as evaluating assignments and preparing lessons (Holmes & Tuomi, 2022).

Universities and institutions must embrace technological improvements in today's digital age, rather than resisting them. Integrating technology into educational projects can offer innovative and significant methods to accomplish learning objectives. Consequently, teachers must reconsider their instructional approaches and investigate inventive means of incorporating technology into the educational process in order to succeed in the digital era (Van Den Berg & Du Plessis, 2023). AI systems have the ability to assist language teachers by automating repetitive work, so allowing them to allocate more time towards interactive and customized teaching methods (Alam, 2023).

Several authors have extensively discussed the possibilities and threats that AI and tools like ChatGPT pose to the field of education. One group of individuals assess

the possible benefits and impact of AI (AI) on their circumstances and methods, while also expressing apprehension about the possibility of AI-generated misinformation and prejudices, as well as the ethical aspects involved. More stringent measures in reaction to AI involve imposing limitations on the utilization of ChatGPT (Yu, 2023). It is crucial to acknowledge that individuals have the ability to utilize ChatGPT or any other technology in inefficient or indolent manners, similar to how they can with any other tool or resource. ChatGPT, similar to other AI systems, is a versatile tool that may be employed for a multitude of reasons, and its efficacy is contingent upon its utilization.

AI holds considerable promise in the domain of EFL teaching and learning (Mohamed, 2024). It has the ability to deliver customized and adaptable learning experiences, enable immediate feedback, and provide virtual tuition. AI-driven systems have the capability to assess the speech or writing of language learners, offering valuable information on areas that need work and recommending customized learning paths (Akmalxonov, 2024). However, previous studies have not thoroughly investigated the factors that motivate EFL teachers to use AI-supported instruction, despite the important insights it provides. Furthermore, prior research has primarily focused on students' use of AI, as evidenced by studies conducted by McEown and Oga-Baldwin, (2019) and Oga-Baldwin et al. (2017). Hence, investigating the impact of AI-assisted language learning technologies on the language learning outcomes of EFL teachers will make a substantial and worthwhile addition to the existing research.

In sum, drawing on the tenets of SDT, the present study aims to contribute to the existing body of research by investigating the teachers' motivating elements that impact the acceptance of AI technologies in foreign language teaching in the context of Saudi Arabia. This study directs its attention towards teachers, identifying key elements that either promote or hinder the adoption of AI among teachers. In particular, the purpose of the study is to gather information on how AI technologies might either enhance or impede the motivating aspects outlined by SDT, namely autonomy, competence, and relatedness. Moreover, the study highlights the challenges and limitations associated with AI in language teaching, stressing the importance for teachers to recognize AI's potential drawbacks and limitations.

#### 3. Method

# 3.1. Participants

The participants were six EFL teachers from Saudi Arabia. The participants were university professors who delivered academic CALL courses, employed digital technology for teaching language-related subjects, and/or integrated digital technology into language instruction across virtual, blended, or face-to-face technology-enhanced environments. The criteria for AI application varied from face-to-face classes utilizing AI for distributing assignments and electronic materials to teaching within virtual settings. To ensure the interviewees' anonymity, they are subsequently referred to as I-1, I-2, ... I-6 (Interviewee 1, ... Interviewee 6). The participants' biographies, detailing their gender, teaching context, academic degree, language teaching experience, and experience in technology integration, are summarized in Table 1.

Table 1

Demographic information of the participants							
Participant's	Gender	Highest	Context(s) of	Experience	Experience		
attributed ID		degree	English language	in English	in using AI		
		completed	teaching	language	in English		
				teaching	teaching		
T1	Male	PhD	University/Language	15	3		
			Institute				
T2	Female	M.A.	University/Language	6	3		
			Institute				
Т3	Male	M.A.	University/Language	15	2		
			Institute				
T4	Female	PhD	University/Language	15	4		
			Institute/School				
T5	Male	PhD	University/Language	10	4		
			Institute/School				
T6	Male	M.A.	Language	6	2		
			Institute/School				

The participants were recruited through convenience sampling, a form of

nonprobability sampling (Cohen et al., 2007). Convenience sampling allows researchers to access participants who are readily available and willing to provide rich, in-depth data on a complex issue like AI integration in language teaching (Cohen et al., 2007). It was ensured that the sample included participants from diverse educational settings (university, language institutes, and schools), thereby reflecting a range of experiences. Although a sample size of six participants may appear limited, data saturation was reached. As highlighted by Guest et al. (2006), data saturation can be achieved with a small sample size when the focus is on a homogeneous group, and the interview questions are designed to explore specific themes in depth. In our case, the participants were all EFL teachers with a similar professional background, which helped us reach saturation more efficiently. Additionally, we applied the principle of thick description which is essential for providing rich, detailed accounts of the participants' experiences and perspectives. According to Mackey and Gass (2015), thick description enhances the trustworthiness and depth of qualitative research, allowing researchers to capture the complexity of the participants' responses, despite the small sample size. The depth and richness of the responses, facilitated by thick description, enabled us to explore the key motivational factors related to AI adoption thoroughly.

#### 3.2. Instrumentation

We employed a semi-structured interview to collect data. The development of the interview protocol was informed by established motivational models within the literature. The interview questions centered on EFL teachers' views regarding their teaching roles, self-image, autonomy, confidence, self-efficacy, competence, skills, and knowledge, as well as their emotional connections relevant to their teaching duties. Additionally, the questions addressed their abilities in problem-solving related to pedagogical and technical challenges, their approaches to ethical dilemmas, and their decision-making processes in technology-enhanced teaching environments. A panel consisting of three professors evaluated and validated the interview questions. The inquiry further investigated how AI technologies might either support or hinder the motivational factors identified by SDT, specifically autonomy, competence, and

relatedness.

#### 3.3. Data Collection Procedure

To gather the data, announcements were disseminated within Saudi universities, as well as among English language faculties and departments. Face-to-face and video conferencing interviews and voice messages were conducted with participants, using platforms such as WhatsApp, Telegram, Skype, and Google Meet. The face-to-face interviews were audio-recorded, whereas the online interviews were screen-recorded. The interview duration varied from 20 to 40 minutes, accumulating a total of 190 minutes. Data collection continued until data saturation was achieved, as advised by Cohen et al. (2007); that is, the data collection and analysis persisted until no new information surfaced and recurring themes were observed. The use of semi-structured interviews allowed for detailed exploration of the unique factors influencing each participants' motivation and engagement with AI, which is appropriate for the study's qualitative aims (Creswell, 2013). The recorded interviews were transcribed verbatim to facilitate subsequent data analysis.

# 3.4. Data Analysis

In this study, we employed a hybrid research model combining both inductive and deductive approaches. The deductive component stemmed from the use of SDT as our guiding framework, with its three well-established core components: autonomy, competence, and relatedness. These constructs provided a theoretical foundation for structuring the initial analysis. However, we adopted an inductive approach during the coding process to allow new sub-themes to emerge directly from the data. As we conducted the interviews and analyzed the teachers' experiences with AI in their EFL classrooms, we observed specific contextual and practice-based nuances. This led to the development of additional sub-themes. Thus, the hybrid approach allowed us to ground our analysis in SDT while remaining open to the unique insights emerging from the data, ensuring that our findings reflected both the theoretical framework and the real-world practices of EFL teachers using AI.

To analyze the collected data, a qualitative analytical approach was employed. The analysis involved the use of a coding scheme consisting of open coding, axial coding, and selective coding. The data were categorized based on the constant comparison approach. To ensure robust categorization and thematization of the data, the transcripts were coded based on the interviewees' statements that expressed their concerns. Throughout the analysis process, the inferred codes were constantly compared with the theoretical and conceptual frameworks referenced in the relevant literature. This allowed for the emergence of new categories, in addition to the existing ones. Finally, major themes emerged.

To ensure the reliability of the inferences, tests were conducted to estimate intercoder reliability, following the guidelines proposed by Cohen et al. (2007). For this purpose, a second coder, who was familiar with the coding scheme and specifically trained for this study, independently coded ten percent of the randomly selected data. In doing so, the inter-rater reliability was reported (ICC = .94). Any disagreements in coding were thoroughly discussed and resolved. The qualitative data were analyzed by inductive analysis and constant comparison methods, using the MAXQDA software version 2020, to look for common patterns, differences, and substantive themes (Strauss & Corbin, 1998). By comparing the patterns, the generality of the findings was enhanced (Miles & Huberman, 1994). Furthermore, after data analysis, one copy of the report was shared with the participants to do member checking. Once they confirmed the report, the trustworthiness of the data was confirmed.

#### 4. Results and Discussion

This section elaborates on the definitions of the themes and sub-themes. Examples of the themes are provided within the text. Table 2 illustrates the themes and summarizes their frequency of occurrences and percentages in the data.

# Table 2 Summary of the Major Themes of Exploring EFL Teachers' Motivation to Use AI in

I	heir	I	'eaci	hing

Major Themes	Categories (sub-themes)	Frequency	Percentage
	Mutual support and community building	24	17.39
	Interaction between teachers, AI and students	60	43.48
	Shared experiences of teachers and students in adapting to AI	14	10.15
Relatedness	Teachers' role in balancing the use of technology	12	8.69
	Responsibility to guide students/teachers in an ethical manner	12	8.69
	Teacher' Relatedness	16	11.50
	Teachers' supervision and control over AI usage	37	22.42
Autonomy	Self-initiated commitment to staying updated with technology	33	20
·	Concern about excessive reliance on AI	12	7.28
	Personal agency and independent thinking	23	13.94
	Autonomy in doing professional tasks	60	36.36
	Strengthening teachers' competence with AI tools	51	27.57
Commetence	Competence in teaching various skills with AI	71	38.38
Competence	Teachers staying up-to-date and proficient	42	22.70
	AI for boosting student competence	8	4.32
	AI training for teachers and students	13	7.03

# 4.1. Relatedness

The findings indicated that relatedness was one of the three fundamental psychological needs identified in SDT, alongside autonomy and competence. According to SDT, relatedness refers to the need to feel connected to others, to experience a sense of belonging, and to maintain close and secure relationships. This need for relatedness plays a vital role in fostering intrinsic motivation to use AI for EFL teaching purposes as teachers were more likely to engage in activities and pursue goals when they feel supported and connected to others. In the context of AI, when the need for relatedness is satisfied, individuals are more likely to engage in behaviors that are intrinsically motivated, meaning they participate in activities out of genuine interest and personal satisfaction rather than external pressures or rewards. This connection between relatedness and intrinsic motivation was particularly important in AI-based teaching, where fostering a sense of community and support can lead to

more engaged, motivated, and fulfilled individuals (Ryan & Deci, 2017). In addition, enhancing teacher-student relatedness through online platforms can also reduce learners' boredom (Derakhshan et al., 2021).

# 4.1.1. Mutual support and community building

Our findings revealed that mutual support and community building play a crucial role in motivating teachers to effectively integrate AI into their teaching practices. This collaborative environment enhances both teacher and student engagement, particularly when AI is used to facilitate communication and peer support within the classroom. The interaction between educators and learners, enhanced through AI tools, can significantly increase classroom engagement, especially when there is adequate supervision to guide younger students who may not fully grasp the ethical implications of AI. One of the interviewees mentioned:

"Regarding the differences between a class that uses AI and one that does not, in my opinion, an AI class can be more beneficial and time-saving for the teacher. It can increase interaction in the class, provided that there is supervision, especially for younger ages and lower levels because those who need guidance may not understand the drawbacks and ethical issues of AI" (T3, Interview)

Continuous learning is another key result of community building through AI, and educators often stay updated on the latest AI advancements through platforms like YouTube, online courses, and educational conferences (T6, Interview). This knowledge is then shared within the educational community, promoting a culture of collaboration and mutual growth (Holmes & Tuomi, 2022). This culture fosters emotional connections between teachers and students, as they work together to overcome challenges associated with AI, thereby making the learning experience more meaningful (Kim, 2023; Kim et al., 2022). Additionally, as stated by one of the participants, AI acts as an assistant, helping educators extend their knowledge beyond their expertise, which they can then share with both colleagues and students (T3, Interview). This process not only enhances the efficiency of learning but also encourages a more inclusive and supportive educational environment.

"Teachers need collaboration in order to make benefit of AI, especially at the initial stages of their career" (T3, Interview). Moreover, incorporating AI into institutional policies and teaching materials can raise awareness among students and allow them to capitalize on AI's strengths, while also fostering discussions among educators about best practices (T2, Interview). These collaborative efforts contribute to a more motivated and informed educational community that is well-prepared to integrate AI into learning and teaching processes.

# 4.1.2. Interaction between teachers, AI and students

The interviewees indicated various degrees of Interaction between teachers, AI and students. The integration of AI in educational settings fosters a dynamic interaction between teachers and students, which significantly contributes to mutual support and community building. This collaborative environment is enhanced by the diverse ways in which AI is utilized. As stated by one of the participants, AI can facilitate meaningful interactions between learners and technology, such as creating questions from texts, which allows students to engage more deeply with the material (T3, Interview). This type of interaction aids in comprehension and builds a sense of accomplishment and motivation among students because learners' success depends on their emotions in learning environments (Derakhshan & Shakki, 2024). Moreover, AI has been shown to create strong emotional connections between teachers and learners by serving as a collaborative tool for overcoming challenges. This joint effort in navigating AI's complexities fosters a shared sense of purpose and mutual support within the educational community. An interviewee said:

"Sometimes when I am not updated, I try to consult with my students and see what technologies they use, or even my colleagues, because I believe this will increase my efficacy and professional development and competence. As a result, it will make me a more capable teacher and allow me to transfer and share this capability with my language learners in the classroom" (T2, Interview).

Another teacher believed that the ability of AI to provide immediate feedback and corrections makes the learning experience more interactive and responsive, which is crucial in maintaining student engagement and teacher effectiveness (T6, Interview).

The recognition that AI as an indispensable tool in modern education reinforces its role in community building. One participant believed that the teachers who embrace AI can better connect with their students, avoiding the risk of appearing outdated or disconnected (T2, Interview). By promoting collaboration, fostering emotional connections, and enhancing both student and teacher capabilities, AI plays a pivotal role in creating a supportive and dynamic educational environment.

# 4.1.3. Shared experiences of teachers and students in adapting to AI

Our findings reveal that teachers and students often share a collaborative learning process when adapting to AI tools, working together to navigate challenges and enhance their understanding of these technologies. As both parties engage with AI tools, teachers often adapt AI-generated content to align with cultural and educational contexts, while students become more involved in the learning process. By working together, teachers and students navigate the challenges of AI, creating a supportive community that encourages innovation and motivation in the classroom. For example, one of the participants emphasized the importance of sharing experiences of teachers and students in adapting to AI and stated:

"AI made a good emotional connection between teachers and learners as well they collaborating and sharing experiences on solving the challenges on AI and employing it for their purposes" (T3, Interview)

#### 4.1.4. Teachers' role in balancing the use of technology

The findings indicated that teachers are central to the effective integration and balancing of technology, particularly AI, in the classroom. The participants believed that their role extended beyond simply implementing technological tools; they were also responsible for critically assessing and adapting AI resources to align with the specific cultural, educational, and developmental needs of their students. They also highlighted that EFL teachers need to ensure that AI is used in a way that enhances learning rather than replacing the human elements of education, such as creativity,

empathy, and individualized attention. A participant emphasized the importance of teachers' role in balancing the use of technology and stated:

"In my opinion, a good teacher is one who does not rely completely on AI but uses it as a tool or aid, enhances their digital literacy, and stays updated with new sciences and modern technologies" (T4, Interview).

Moreover, as stated by the participants, educators need to act as gatekeepers who moderate the influence of AI, ensuring that its use complements rather than dominates the educational experience (T5, Interview). By thoughtfully incorporating AI, teachers foster a learning environment that leverages the strengths of technology while maintaining the essential human connection in education, thus promoting a balanced and holistic approach to student development.

# 4.1.5. Responsibility to guide students/teachers in an ethical manner

Guiding students and teachers in the ethical use of AI in education involves not only teaching the technical aspects of AI but also embedding ethical considerations into its use. The participating teachers believed that proper supervision, especially for younger students, is crucial to help them navigate AI's ethical implications effectively. One of the interviewees mentioned:

"I think establishing a universal Code for using AI in any fields for any purposes is a MUST. Like it or lump it we are living with Z generation" (T5, Interview).

Educators must emphasize correct citation practices to ensure that students do not rely solely on AI-generated content without proper paraphrasing and attribution. The findings revealed that establishing a universal code for AI usage in education could be critical for managing AI responsibly, particularly as technology becomes more integrated into learning. Teachers play a pivotal role in selecting AI tools that meet ethical standards and discussing these with students. Broader discussions and workshops on AI ethics are necessary to equip both students and educators with the knowledge to use AI responsibly. Ultimately, as the findings showed, AI integration in the classroom should enhance human creativity and judgment, fostering a culture of ethical AI use that supports a supportive and innovative learning environment.

#### 4.2. Autonomy

A sense of autonomy is crucial in educational and organizational settings, where fostering a sense of ownership over one's actions can significantly enhance engagement and performance (Deci & Ryan, 2000). Research indicates that environments that support autonomy contribute to greater psychological health and well-being, as individuals feel empowered to pursue goals aligned with their interests and values (Ryan & Deci, 2017).

# 4.2.1. Teachers' supervision and control over AI usage

In the context of SDT, autonomy is a critical psychological need that, when satisfied, enhances motivation. Teachers' supervision and control over AI usage in the classroom significantly contribute to their sense of autonomy, allowing them to maintain professional authority and decision-making power. By actively overseeing how AI is integrated into their teaching practices, teachers can ensure that the technology aligns with their pedagogical goals and cultural context. For example, AI can save time by automating tasks such as slide creation, which allows teachers to focus on more impactful activities that directly benefit student learning (T2, Interview). Moreover, teachers' ability to supervise AI-generated content and monitor its appropriateness ensures that they remain the primary decision-makers in the classroom, further enhancing their autonomy (T5, Interview). This control over AI not only supports their professional identity but also fosters a creative and dynamic learning environment where teachers feel empowered to innovate while still adhering to educational standards. As teachers guide the use of AI, they maintain the autonomy necessary to adapt the technology to suit the specific needs of their students, ultimately leading to increased motivation and effectiveness in teaching.

Teachers' supervision and control over AI usage in the classroom are closely linked to preserving their professional autonomy (Niu et al., 2024). As AI tools become more prevalent in education, there is a risk that these technologies could undermine teachers' ability to make independent decisions about their teaching

practices. When AI is used to automate tasks like curriculum planning and assessment, it might restrict teachers' creative input and their freedom to tailor lessons to their students' specific needs. Therefore, as one of the participants stated:

"It is crucial that teachers remain actively involved in the deployment and management of AI in the classroom, ensuring that these tools serve as support rather than substitutes for their professional judgment and expertise" (T2, Interview).

# 4.2.2. Self-initiated commitment to staying updated with technology

In the context of AI, teachers' autonomy is enhanced when they actively choose to engage with emerging technologies like AI. This proactive approach not only improves their digital literacy but also fosters a greater sense of control and competence in their professional and academic environments. For example, one participant said:

"I think the teachers who utilize AI tools for lesson planning and assessment feel more empowered and effective in their roles" (T5, Interview).

Despite initial unfamiliarity and challenges, those who take the initiative to learn and integrate AI into their practices experience increased autonomy, which in turn enhances their motivation and satisfaction. One of the participants stated that: "We must admit that AI is everywhere today and has become a part of our classroom so as a teacher we should always equip ourselves with technologies specially AI, it really helped me to expand my digital literacy "(T4, Interview). This commitment to technological advancement exemplifies how autonomy in learning and teaching can drive continuous professional growth and motivation.

#### 4.2.3. Concern about excessive reliance on AI

Concerns over the over-reliance on AI in educational settings highlight the potential risks to teachers' and students' autonomy. While AI tools can significantly enhance efficiency and support educational processes, excessive dependence on these technologies can undermine the development of critical thinking and independent

learning skills. For instance, one of the teachers stated that:

"Teachers and students who rely heavily on AI for tasks such as grammar correction or content generation may experience a diminished sense of efficacy and autonomy, feeling less confident in their abilities to perform these tasks without technological assistance (T2, Interview).

Furthermore, the paradoxical state of feeling dependent on AI can lead to a perception of inadequacy, where individuals feel they cannot function effectively without these tools as one of the interviewees explained:

"It has a paradoxical state where they use AI so much that they feel dependent on it and feel that they are nothing without it" (T2, Interview).

To mitigate these risks, it is crucial to establish clear ethical guidelines and norms that define the appropriate use of AI, ensuring that it serves as a supplementary tool rather than a replacement for human judgment and creativity. By fostering an AI culture that respects and enhances autonomy, educators can maintain their professional independence and ensure that AI is used in a way that supports, rather than detracts from, their instructional goals (T3, Interview).

#### 4.2.4. Personal agency and independent thinking

The qualitative findings showcased that personal agency and independent thinking are crucial components of autonomy as outlined by SDT. In educational settings, the integration of AI provides opportunities for language teachers and students to enhance their autonomy by exercising personal agency and fostering independent thinking. When teachers judiciously use AI, they can tailor AI-generated content to meet the specific needs and cultural contexts of their classrooms, thereby reinforcing their professional autonomy. As stated by a participant, this approach allows teachers to maintain control over their instructional methods and ensures that AI serves as a tool to enhance, rather than undermine, their role in the classroom (T4, Interview). Moreover, by adapting AI suggestions to align with their educational goals and classroom realities, teachers demonstrate independent thinking. Autonomy in utilizing AI empowers teachers to innovate while retaining the flexibility to modify or reject AI-generated content that does not suit their pedagogical objectives, thus

strengthening their personal agency and overall effectiveness in the classroom as declared by one of the participants:

"In my opinion, the introduction of technology specially AI into language teaching has primarily served the language learner's knowledge and reduced the teacher's workload and responsibilities and lead to have more autonomy for teacher resulting increasing teachers' capabilities" (T3, Interview).

# 4.2.5. Autonomy in doing professional tasks

The qualitative findings unveiled that AI could significantly boost teachers' autonomy by providing tools that streamline various instructional tasks, thereby allowing educators to exercise greater control over their teaching practices. For instance, one of the participants stated:

"AI can lighten the workload by automating tasks such as generating reading materials and formulating questions, which enables teachers to focus more on higher-order pedagogical strategies (T1, Interview)." This autonomy in using AI allows teachers to tailor educational content to meet the specific needs of their students, such as adjusting vocabulary levels or incorporating cultural nuances, thus enhancing the relevance and effectiveness of instruction.

By using AI to handle routine tasks, teachers gain more freedom to innovate and adapt their teaching strategies, fostering a sense of professional empowerment and independence. This enhanced autonomy ultimately contributes to self-directedness in roles. One interviewee stated:

"When I compare my online classes with previous classes where AI did not exist or was not available in this form, I have to say that the main difference is that I go to class with more confidence, meaning that even if I do not know something or cannot remember it at that moment, I can easily look it up using AI" (T2, Interview).

#### 4.3. Competence

Competence is a crucial psychological need that drives individuals to seek out challenges, master tasks, and achieve success. When people feel competent, they are more motivated and engaged in their activities, whether in educational settings, work, or personal growth. Competence enhances the intrinsic motivation to pursue and overcome challenges, leading to a greater sense of accomplishment and well-being (Ryan & Deci, 2017).

#### 4.3.1. Strengthening teachers' competence with AI tools

The findings indicated that strengthening EFL teachers' competence with AI tools is essential not only for their professional growth, but also for their students' engagement and learning outcomes. Integrating AI in classrooms can serve as a powerful tool to build teacher competence, leading to more confident and motivated educators.

In term of ongoing learning and adaptation, the participants believed that EFL teachers must continuously expand their knowledge of AI and digital literacy to remain effective in modern classrooms. This ongoing learning aligns with the SDT's concept of competence, as mastering AI tools empowers teachers to manage classroom challenges better and adapt lesson plans to meet diverse student needs. One of the participants said:

AI tools assist in lesson planning, material development, and even offering immediate feedback to students, which deepens the learning experience (T3, Interview).

One of the challenges teachers face when using AI is to ensure that AI-generated content is culturally and contextually appropriate. One of the interviewees said:

"Competence in using AI involves mastering the technology while critically evaluating and modifying AI suggestions to fit the specific classroom context, ensuring that the content resonates with students (T5, Interview).

#### 4.3.2. Competence in teaching various skills with AI

The results indicated that AI offers a revolutionary approach to the development of language skills by enabling personalized, contextually relevant, and culturally

appropriate learning experiences. For example, AI can provide tailored reading materials, check pronunciation, and guide learners through writing exercises by offering corrections and feedback. This capability allows teachers to address students' individual needs and improve teaching skills. One of the interviewees commented:

"AI enables the training and teaching of skills not only separately but also through a combination of AI with appropriate prompts. For instance, if the topic is traveling, AI can provide a reading text, assess the learner's pronunciation, and prompt them to write something similar to the AI model. This allows AI to provide corrections and improve the learner's writing skills. Considering all these capabilities, I firmly believe that AI has the potential to revolutionize skill training. (T6, Interview).

AI also assists in automating routine tasks such as quiz generation and classroom management, which frees up teachers to focus more on direct instruction and student engagement. This automation enhances classroom efficiency and creates a more organized learning environment, further boosting the teacher's sense of competence and autonomy. Moreover, AI fosters a collaborative environment where teachers and students can share experiences and challenges related to AI use. The effective use of AI in teaching improves skill training and contributes to the professional growth and identity of teachers.

#### 4.3.3. Teachers staying up-to-date and proficient

The dynamic nature of AI in education necessitates that EFL teachers embrace lifelong learning, positioning themselves as perpetual learners alongside their students. This commitment to continuous learning fosters enthusiasm and curiosity, encouraging EFL teachers to explore innovative ways to integrate AI into their language teaching practices, thus staying proficient and relevant in the classroom. The use of AI in language education brings sweeping changes, making it essential for EFL teachers to adapt to this new wave. Teachers must blend traditional teaching skills with technological proficiency, using AI not only for lesson planning and assessment but also for enhancing student interaction and engagement. One of the participants believe that:

"I think classes that incorporate AI are more successful because nowadays nobody wants to follow the old-fashioned ways. I strongly believe that AI can facilitate learning so I think classes that use technology or AI are more effective educationally and they are more innovative as well (T5, Interview).

Moreover, it has been noted that "teachers must be proficient in search strategies and familiar with various AI tools and digital content which enables them to provide students with more targeted and effective learning experiences (T3, Interview). In addition to their role as educators, teachers must now also serve as material developers and adapters, utilizing AI and online resources to find up-to-date content tailored to their students' needs. This evolution in the teacher's role highlights the importance of staying updated with technological advancements to avoid feeling inadequate in front of their students.

# 4.2.4. AI for boosting student competence

When teachers integrate AI into their classrooms, they can enhance students' competence by providing tailored, interactive, and engaging learning experiences. AI tools allow students to move beyond traditional learning methods, offering personalized feedback and interactive opportunities that improve skills such as speaking, listening, and writing. For instance, AI-powered tools can facilitate two-way conversations for practicing pronunciation, provide diverse content that surpasses traditional textbooks, and even enable self-assessment and editing of writing tasks, reducing student stress. A teacher stated:

"My students can no longer solely rely on the textbook as in the past; they can bring in content and tasks from the internet. It is no longer like before, where they would just play a CD and have the students listen. Now, for listening, for writing and speaking, there are hundreds of resources, cartoons, YouTube videos, and most importantly, various AI tools that can not only save the teacher's time." (T3, Interview)

This not only boosts student competence but also motivates them to engage more deeply with the learning process, both inside and outside the classroom.

# 4.2.5. AI training for teachers and students

The participants expressed the need for AI training for the teachers and students to enhance their competence. The lack of training in AI poses significant barriers, making it crucial to advocate for more comprehensive educational technology training, such as Teacher Training Courses (TTC) focused on AI adaptation. In this regard, one of the interviewees stated that:

"The proper use of AI should be taught and instructed to students, just like when a new tool, a new machine, or a new technology is introduced in any field, there is a need for training and learning on how to use it properly." (T3, Interview)

By building a strong AI community and establishing an ethical code that guides AI use, both teachers and students can confidently integrate AI into their learning environments. This approach fosters autonomy and self-efficacy among teachers and students and enhances motivation to use AI effectively both inside and outside the classroom. One of the participants stated:

"The proper use of AI should be taught and instructed to students, just like when a new tool, a new machine, or a new technology is introduced in any field, there is a need for training and learning on how to use it properly." (T3, Interview)

#### 5. Conclusion

The integration of AI in EFL teaching has profound implications for enhancing both teaching practices and student learning outcomes. Through the lens of SDT, our study underscores the pivotal role of AI in fulfilling the psychological needs of autonomy, competence, and relatedness, which are essential for fostering intrinsic motivation among teachers and students alike. The findings imply that AI tools can significantly enhance teachers' competence by automating routine tasks, offering real-time feedback, and providing tailored instructional strategies. Another implication is that AI alleviates the workload and empowers teachers to focus on fostering meaningful interactions with students, thereby enhancing their sense of autonomy and competence in the classroom. Moreover, the collaborative nature of AI fosters a sense of relatedness among teachers and students, creating a more engaging and supportive

learning environment.

The present study had several limitations. The study's focus on a limited sample of EFL teachers may limit the generalizability of the findings. Further comparative research is required to study the contextual factors that differentiate AI-use of EFL teachers. Future research should explore the strategies for mitigating the risks associated with AI over-reliance. Investigating the ethical considerations surrounding AI usage was out of the scope of the present study. Future studies can explore whether AI integration into EFL teaching supports ethical goals. Further research is also needed to provide detailed knowledge about EFL students' perception of the affordances and challenges of AI use in language learning.

# Appendix A. Interview Questions

- 1. Which artificial intelligence tools do you use (directly: in the class or indirectly: out of the class, for any purposes) in your teaching (please specify their names)? For which purposes do you use the AI technologies? How often do you use them? Please provide examples.
- 2. What is your overall perspective on teaching language skills (specify each skill)? How is the AI mentioned in the previous question in line with your perspective? What are the advantages and limitations of this tool? Please provide examples.
- 3. How comfortable and confident do you consider yourself in using AI tools for language teaching? Please provide an example of AI tool you have recently used in your teaching. What was your experience of becoming familiar with the tool and learning to use it in classroom?
- 4. How comfortable and confident do you consider yourself in troubleshooting when problems arise during teaching with AI-assisted teaching? Please provide an example of a recent situation where you had to troubleshoot a situation.
- 5. Can you effectively teach students how to use AI technologies for improving their language learning? Please provide examples.
- 6. How different do you think classes which use AI technology are from classes which do not use it? What would you consider as the major differences?

- 7. In which ways do you think the recent technological advancements have changed or added to the roles and responsibilities of an English teacher? What are the roles of teachers who use AI technology in teaching? How do you define an effective and successful CALL teacher who can use AI technology?
- 8. Which constraints do you do you deal with (e.g., personal, contextual, administrative, cultural ideological, etc.) in using AI technology in language teaching? Please explain how you deal with them.
- 9. Are there any moral concerns that you think should be cultivated regarding the use of Ai technology for proper language teaching/learning? If so, please provide examples and explain what you do for establishing them.
- 10. How do you attempt to improve your knowledge and skills of using AI technology in language instruction or teacher education? How do you keep these skills and knowledge updated and solve your problems?

#### 6. References

- Alam, A. (2023). Harnessing the power of AI to create intelligent tutoring systems for enhanced classroom experience and improved learning outcomes. In G. Rajakumar, K-L Du, & Á. Rocha (Eds.), *Lecture notes on data engineering and communications technologies* (pp. 571–591). https://doi.org/10.1007/978-981-99-1767-9 42
- Bhutoria, A. (2022). Personalized education and AI in the United States, China, and India: A systematic review using a Human-In-The-Loop model. *Computers and Education Artificial Intelligence*, *3*. https://doi.org/10.1016/j.caeai.2022.100068
- Chen, Y. (2024). Effects of technology-enhanced language learning on reducing EFL learners' public speaking anxiety. *Computer Assisted Language Learning*, 37(4), 789–813. https://doi.org/10.1080/09588221.2022.2055083
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed). Routledge.
- Chiu, T. K., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with AI (AI) based chatbot. *Interactive Learning Environments*. Advance online publication. <a href="https://doi.org/10.1080/10494820">https://doi.org/10.1080/10494820</a>. 2023.2172044
- Collie, R. J., & Martin, A. J. (2024). Teachers' motivation and engagement to harness Generative AI for teaching and learning: The role of contextual, occupational, and background factors. *Computers and Education: Artificial Intelligence*, 6. https://doi.org/10.1016/j.caeai.2024.100224
- Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches. Sage.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Plenum.
- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within em-bedded social contexts: An overview of self-determination theory. In Ryan, R.M. (Ed.), *The Oxford handbook of human motivation* (pp. 85–103). Oxford University Press.

- Chen, Y., Zhi, Y., & Derakhshan, A. (2025). Integrating artificial intelligence (AI) into the English as a foreign language classroom: Exploring its impact on Chinese English students' achievement emotions and willingness to communicate (WTC). *European Journal of Education*. https://doi.org/10.1111/ejed.70157
- Derakhshan, A. (2025). EFL students' perceptions about the role of generative artificial intelligence (GAI)-mediated instruction in their emotional engagement and goal orientation: A motivational climate theory (MCT) perspective in focus. *Learning and Motivation*. https://doi.org/10.1016/j.lmot.2025.102114
- Derakhshan, A., & Azari Noughabi, M. (2024). A self-determination perspective on the relationships between EFL learners' foreign language peace of mind, foreign language enjoyment, psychological capital, and academic engagement. *Learning and Motivation*, 87. https://doi.org/10.1016/j.lmot.2024.102025
- Derakhshan, A., & Ghiasvand, F. (2024). Is ChatGPT an evil or an angel for second language education and research? A phenomenographic study of research-active EFL teachers' perceptions. *International Journal of Applied Linguistics*. Advance online publication. https://doi.org/10.1111/ijal.12561
- Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2021). Boredom in online classes in the Iranian EFL context: Sources and solutions. *System*, *101*. https://doi.org/10.1016/j.system.2021.102556
- Derakhshan, A., & Shakki, F. (2024). How innovative are innovative research approaches in the psychology of the language teachers and learners: A state-of-the-art review. *Language Related Research*, *15*(5), 1–34. http://doi.org/10.29252/LRR.15.5.1
- Derakhshan, A., Teo, T., & Khazaie, S. (2024). Is game-based language learning general or specific-oriented? Exploring the applicability of mobile virtual realities to medical English education in the middle east. *Computers & Education*, *213*. https://doi.org/10.1016/j.compedu.2024.105013
- Ebadi, S., & Amini, A. (2022). Examining the roles of social presence and human-likeness on Iranian EFL learners' motivation using AI technology: A case of CSIEC

- chatbot. *Interactive Learning Environments*. Advance online publication. https://doi.org/10.1080/10494820.2022.2096638
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822X05279903
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, *57*(4), 542–570. https://doi.org/10.1111/ejed.12533
- Huang, A. Y., Lu, O. H., & Yang, S. J. (2023). Effects of artificial Intelligence–Enabled personalized recommendations on learners' learning engagement, motivation, and outcomes in a flipped classroom. *Computers & Education*, 194. https://doi.org/10.1016/j.compedu.2022.104684
- Kim, J. (2023). Leading teachers' perspective on teacher-AI collaboration in education. *Education and Information Technologies*. Advance online publication. https://doi.org/10.1007/s10639-023-12109-5
- Kim, J., Lee, H., & Cho, Y. H. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. *Education and Information Technologies*, 27(5), 6069–6104. https://doi.org/10.1007/s10639-021-10831-6
- Mackey, A., & Gass, S. M. (2015). Second language research: Methodology and design. Routledge.
- McEown, M. S., & Oga-Baldwin, W. Q. (2019). Self-determination for all language learners: New applications for formal language education. *System*, *86*. https://doi.org/10.1016/j.system.2019.102124
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- Mohamed, A. M. (2024). Exploring the potential of an AI-based Chatbot (ChatGPT) in enhancing English as a Foreign Language (EFL) teaching: Perceptions of EFL faculty members. *Education and Information Technologies*, 29(3), 3195–

- 3217. https://doi.org/10.1007/s10639-023-11917-z
- Ng, D. T. K., Leung, J. K. L., Su, J., Ng, R. C. W., & Chu, S. K. W. (2023). Teachers' AI digital competencies and twenty-first century skills in the post-pandemic world. *Educational Technology Research and Development*, 71(1), 137–161. https://doi.org/10.1007/s11423-023-10203-6
- Niu, W., Zhang, W., Zhang, C., & Chen, X. (2024). The role of artificial intelligence autonomy in higher education: A uses and gratification perspective. *Sustainability*, *16*(3). https://doi.org/10.3390/su16031276
- Núñez, J. L., Fernández, C., León, J., & Grijalvo, F. (2014). The relationship between teacher's autonomy support and students' autonomy and vitality. *Teachers and Teaching*, *21*(2), 191–202. https://doi.org/10.1080/13540602.2014.928127
- Oga-Baldwin, W. Q., Nakata, Y., Parker, P., & Ryan, R. M. (2017). Motivating young language learners: A longitudinal model of self-determined motivation in elementary school foreign language classes. *Contemporary Educational Psychology*, 49, 140–150. https://doi.org/10.1016/j.cedpsych.2017.01.010
- Reeve, J. (2012). A SDT perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). Springer. https://doi.org/10.1007/978-1-4614-2018-7\_7
- Russell, S. J., & Norvig, P. (2016). *Artificial intelligence: A modern approach*. Pearson.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford publications.
- Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, *14*. <a href="https://doi.org/10.3389/fpsyg.2023.1260843">https://doi.org/10.3389/fpsyg.2023.1260843</a>
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research. Sage publications.

- Yurt, E., & Kasarci, I. (2024). A questionnaire of AI use motives: A contribution to investigating the connection between AI and motivation. *International Journal of Technology in Education*, 7(2), 308–325. https://doi.org/10.46328/ijte.725
- Vallerand, R., & Ratelle, C. (2002). Intrinsic and extrinsic motivation: A hierarchical model. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination* (pp. 37–58). The University of Rochester Press.
- Van Den Berg, G., & Du Plessis, E. (2023). ChatGPT and generative AI: Possibilities for its contribution to lesson planning, critical thinking and openness in teacher education. *Education Sciences*, *13*(10). https://doi.org/10.3390/ educsci13100998
- Walter, Y. (2024). Embracing the future of AI in the classroom: The relevance of AI literacy, prompt engineering, and critical thinking in modern education. *International Journal of Educational Technology in Higher Education*, 21(1). https://doi.org/10.1186/s41239-024-00448-3
- Wei, L. (2023). AI in language instruction: Impact on English learning achievement, L2 motivation, and self-regulated learning. *Frontiers in Psychology*, 14. <a href="https://doi.org/10.3389/fpsyg.2023.1261955">https://doi.org/10.3389/fpsyg.2023.1261955</a>
- Xin, Z., & Derakhshan, A. (2025). From excitement to anxiety: Exploring EFL learners' emotional experiences in the AI-powered classrooms. *European Journal of Education*, 60(1). e12845 https://doi.org/10.1111/ejed.12845
- Yu, H. (2023). Reflection on whether Chat GPT should be banned by academia from the perspective of education and teaching. *Frontiers in Psychology*, *1*. https://doi.org/10.3389/fpsyg.2023.1181712
- Zhang, K., & Aslan, A. B. (2021). AI technologies for education: Recent research & future directions. *Computers and Education Artificial Intelligence*, 2. https://doi.org/10.1016/j.caeai.2021.100025
- Zheng, Y., Wang, Y., Liu, K. S. X., & et al. (2024). Examining the moderating effect of motivation on technology acceptance of generative AI for English as a foreign language learning. *Education and Information Technologies*. Advance online publication. https://doi.org/10.1007/s10639-024-12763-3

# **About Authors**

Areej Radhi Alruwaili is an Assistant Professor in Applied Linguistics in the Department of English, College of Art, Jouf University, Saudi Arabia. She received her PhD degree in Applied Linguistics in 2021 from East Angelia University, UK. Her research interests include positive psychology in SLA, computer-assisted language learning (CALL), the intersection of language and society, language acquisition, bilingualism, and computer-assisted language learning.

**Zhila Kiyanfar** is a PhD candidate at Allameh Tabatabai University, specializing in Applied Linguistics. With a strong focus on technology-assisted language learning, she has forthcoming research set to be published in the Language Related Research journal. Her academic endeavors are fueled by a deep commitment to exploring innovative methodologies aimed at enhancing language acquisition through the integration of digital tools. Her areas of interest include computer assisted language learning (CALL) and individual differences in language learning and teaching.

Mostafa Azari Noughabi has a Ph.D. in Applied Linguistics from Hakim Sabzevari University, Iran. He is a member of the editorial board of Current Psychology. He has published articles in various journals *including System*, *Language Teaching Research*, *ReCALL*, *Studies in Second Language Learning and Teaching*, *Innovation in Language Learning and Teaching*, *Journal of Multilingual and Multicultural Development*, and *Innovation in Language Learning and Teaching*. His research interests are language teacher education, positive psychology in SLA, and computer-assisted language learning.