

## Predictive Power of AI-Generated Corrective Feedback on EFL Learners' Self-Regulation and Language Proficiency: Empirical Evidence from Saudi Arabian Context

Adawiya Taleb Shawaqfeh<sup>1</sup>, Turkey Alshaikhi<sup>2</sup>, Nisar Ahmad Koka<sup>3\*</sup>, Mohamad Ahmad Saleem Khasawneh<sup>4</sup>

<sup>1</sup>English Language and Literature Department, Jadara University, Jordan

<sup>2</sup>English Language & Translation, University of Tabuk, College of Education & Arts, Institute of English Language Teaching, Saudi Arabia

<sup>3</sup>Department of English, Faculty of Languages and Translation, King Khalid University, Abha, Kingdom of Saudi Arabia

<sup>4</sup>Special Education Department, College of Education, King Khalid University, Saudi Arabia

\*Corresponding author's email: [ncoka@kku.edu.sa](mailto:ncoka@kku.edu.sa)

\*ORCID: <https://orcid.org/0000-0002-8718-3991>

Received: 04/06/2025

Revision: 22/08/2025

Accepted: 08/09/2025

Online: 31/12/2025

---

### ABSTRACT

Students learning English as a foreign language (EFL) often face challenges in achieving both linguistic accuracy and fluency, primarily due to the absence of prompt and personalized feedback. AI-generated corrective feedback (AIGCF) offers a promising opportunity by providing timely, tailored support designed to enhance learner autonomy and language proficiency. This study examined the predictive relationships between AIGCF, self-regulation, and language proficiency within a sample of 125 undergraduate students majoring in English Language and Literature at universities in Saudi Arabia, utilizing a non-interventional correlational design and multiple regression analysis. Data were collected utilizing dependable instruments, including a self-regulation questionnaire, a language proficiency assessment, and a perception scale for AIGCF. The Pearson correlation analyses revealed significant positive relationships between AIGCF and self-regulation, AIGCF and language proficiency, and between self-regulation and language proficiency. The findings from the multiple regression analysis indicated that AIGCF and self-regulation together accounted for 36% of the variance in language proficiency. Self-regulation was identified as the more substantial predictor when compared to AIGCF. The findings suggest that students who engage positively with AIGCF are likely to exhibit enhanced self-regulatory behaviors, which in turn contribute to higher proficiency levels. This study, situated within the evolving educational landscape of Saudi Arabia and aligned with the digital goals of Vision 2030, provides empirical evidence highlighting the significance of integrating AIGCF and self-regulation training into EFL programs.

**Keywords:** AI-generated corrective feedback; Self-regulation; Language proficiency; EFL learners; Multiple regression; Saudi Arabia

## Introduction

The rapid progress of artificial intelligence (AI) technologies has greatly influenced multiple sectors, with education, especially in language learning, reaping considerable benefits from these innovations. Wiboolyasarin et al. (2024) highlight the significance of AI-derived tools in fostering collaborative writing environments within EFL contexts, which can enhance proficiency through interactive feedback mechanisms. Escalante et al. (2023) emphasize the importance of AI-generated corrective feedback (AIGCF) as a crucial application, underscoring its potential to foster learner independence, enhance language skills, and alleviate the workload for instructors. Students learning English as a foreign language (EFL) often face difficulties in attaining both accuracy and fluency, which frequently stem from a lack of opportunities for immediate, tailored assistance (Bitchener & Ferris, 2012). Timely and customized corrective feedback, as emphasized by Havranek (2002), is crucial for improving second language (L2) acquisition. AI-driven systems offer a hopeful approach to addressing persistent issues related to educator availability and scalability (Hwang et al., 2025; Namaziandost, 2025; Rezai et al., 2024). Kinder et al. (2025) illustrate this by emphasizing how adaptive AIGCF improves teacher education, providing reliable pedagogical support.

To make the most of this potential, we must situate AIGCF within the broader framework of L2 teaching methodologies. Offering corrective feedback is essential for improving metalinguistic awareness, encouraging self-monitoring, and assisting in error correction, all of which facilitate a faster mastery of language structures. For an extended period, human educators have acted as the primary sources of this kind of feedback (Lin & Crosthwaite, 2024). Nonetheless, issues like large class sizes, varying levels of instructor expertise, and delayed feedback have sparked an increasing interest in automated solutions. Recent advancements in generative AI, particularly with large language models such as GPT-4, have resulted in the creation of sophisticated feedback systems that surpass earlier rule-based or template-driven approaches (Wu et al., 2025). These systems employ advanced language processing methods and sequential reasoning prompts to improve accuracy, reliability, and teaching effectiveness. Muñoz et al. (2025) performed a comparison of feedback produced by ChatGPT and direct corrections given by humans in L2 writing. Their findings showed that the AIGCF was generally more effective, though they proposed that hybrid models might improve results even more. This development represents a noteworthy progression in the provision of automated feedback (Messer et al., 2024).

## Literature review

AIGCF involves utilizing AI-derived systems, including large language models, to automatically detect language output errors and suggest corrections or enhancements. This approach contrasts with conventional teacher-led feedback, which relies on human participation and faces scalability issues, as well as earlier automated systems that depended on inflexible rules without grasping the context. AIGCF effectively aligns with the principles of feedback literacy, enabling learners to cultivate skills in understanding and applying feedback proficiently. Furthermore, it aligns with models of human-computer interaction that highlight flexible, learner-focused designs. For example, Barrot (2023) explores how these AI-driven tools enhance feedback literacy in writing assignments, allowing students to engage more actively with corrections.

AIGCF can significantly improve self-regulation among EFL learners. Self-regulation refers to the capacity of learners to structure, oversee, and modify their methods, serving as an essential element for independent learning and continuous success in language development (Zimmerman, 2000). This encompasses processes associated with reflecting on personal learning, including goal setting and self-assessment, along with behavioral and motivational aspects that empower individuals to take control of their educational journeys. Essential elements encompass monitoring advancement, autonomous learning, efficient time management, and assessing outcomes (Mammadov & Schroeder, 2023). In the field of L2 or foreign language acquisition, self-regulation aids learners in handling complex input and output, choosing appropriate strategies, and overcoming challenges (Zimmerman, 2015). Strong self-regulatory skills are linked to greater independence, better performance, and positive learning attitudes (Winne & Hadwin, 2010). In platforms that utilize AI, the significance of self-regulation grows as students must independently interpret feedback, make adjustments, and improve their skills without continuous oversight from instructors (Chang & Sun, 2024). As a result, nurturing these skills not only encourages immediate progress but also equips learners for ongoing adaptation in various educational settings. Recent research by Xiao and Liu (2024) demonstrates how AI-driven chatbots support the development of self-regulated writing skills, emphasizing positive links to self-efficacy and strategic adjustments.

The AIGCF has the potential to impact overall language proficiency. Proficiency includes a variety of interconnected skills, such as reading, writing, listening, speaking, vocabulary, and grammar, all of which are crucial for effective communication and academic achievement (Council of Europe, 2001). The development of these abilities takes place in a mutually influential manner, shaped by instructional approaches, types of feedback, and individual techniques, such as self-regulation (Al-khresheh et al., 2025). Written corrective feedback often has a more direct impact on grammar and writing accuracy, whereas oral input may be more beneficial for improving pronunciation and fluency (Patra et al., 2022).

The effectiveness of feedback, whether provided by humans, AI, or a blend of both, hinges on how learners absorb, integrate, and respond to it. This process is intricately connected to their metacognitive awareness and self-directed practices (Nicol & Macfarlane-Dick, 2006). Self-regulatory practices, including goal setting, progress tracking, and making necessary adjustments, are essential for improving proficiency in different domains, facilitated by the influence of feedback (Zhu et al., 2024). A thorough view of acquisition should take into account the interrelation of different feedback types, agency, and the complex evolution of proficiency. Wang (2024) contributes to this discussion by illustrating how AI's adaptive feedback boosts engagement, connecting self-regulation with advancements in EFL writing skills.

### *Theoretical and Empirical Foundation of the Study*

This study is grounded in the social cognitive theory of self-regulation, depicting it as a cyclical process comprising three key phases: forethought, where learners set goals and devise strategies; performance, which involves self-monitoring and management; and self-reflection, focusing on assessment and adjustment. AIGCF has the ability to engage with these stages by offering external cues that improve internal processes. For instance, it can assist in planning by providing targeted goal suggestions, enhance results through prompt feedback, and promote self-reflection by recommending modifications. We propose that these interactions could lead to enhancements in self-regulation and language abilities. Recent studies, including those by Du (2025), support this viewpoint; they found that AI-driven tools in mobile applications promoted self-regulated behaviors in EFL vocabulary acquisition, linking external feedback to the improvement of internal strategies.

Research has increasingly focused on the effects of AIGCF on different facets of language learning. Wu et al. (2025) demonstrated that GPT-4, when utilized with tailored prompts, surpassed traditional tools in accuracy and reliability. This development resulted in enhanced writing quality and lessened the burden on educators, despite occasional occurrences of excessive corrections. Similarly, Zhang et al. (2025) compared pure AIGCF with hybrid models in L2 academic writing, emphasizing AI's strengths in grammar and sentence-level improvements, while hybrid models showed greater effectiveness in enhancing motivation and cultivating advanced skills. Fujisawa and Shintani (2025) employed depth of processing theory to investigate the distinctions between direct feedback and AI reformulations. Their findings showed that human-led approaches often enhanced the retention of grammar, whereas AI exhibited potential for scalability.

Alongside East Asian and Western studies, research within Arab EFL contexts highlights the importance of AI-generated feedback in areas that have been less examined. Elmotri et al. (2025) emphasized the positive aspects of user-friendliness and accuracy enhancements of AWCf, along with reduced instructor workloads, while underscoring the significance of customized adaptations. Asadi et al. (2025) expanded on this by examining ChatGPT alongside teacher feedback, noting considerable enhancements in writing across multiple criteria, while also raising concerns about plagiarism and an overreliance on AI. The findings align with broader trends; for instance, Ebadi and Amini (2024) showed that AI-driven chatbots in Iranian EFL contexts improved engagement, while also emphasizing the importance of taking precautions to avoid dependency.

Numerous studies often emphasize the establishment of causal relationships through experiments, frequently overlooking broader correlational viewpoints. A notable limitation lies in the heavy reliance on controlled trials assessing the immediate effectiveness of AIGCF, with insufficient attention given to predictive models that link learners' perceptions of AI to factors like self-regulation and skill development. This study addresses a notable gap by exploring predictive relationships in Saudi Arabia, a setting shaped by the digital strategies of Vision 2030 and the distinct challenges encountered by Arab EFL learners, particularly those pertaining to cultural factors linked to self-regulation and technology adoption. This method connects correlational and experimental frameworks, offering a comprehensive theoretical insight into AIGCF's impact on autonomy and delivering practical advice for the incorporation of educational technology in the Gulf region. This study examines how AIGCF predicts the self-regulation and proficiency of EFL learners by employing multiple regression analysis. Consequently, four research questions were crafted as follows:

1. Is there a statistically significant relationship between AIGCF and the self-regulation of EFL learners?
2. Is there a statistically significant relationship between AIGCF and the language proficiency of EFL learners?
3. To what degree do AIGCF and self-regulation forecast language proficiency in EFL learners?
4. Which predictor demonstrates a greater predictive power for language proficiency in EFL learners: self-regulation or AIGCF?

## **Methods**

### *Design of the Study*

This research employed a non-interventional correlational design to investigate predictive relationships and natural associations among variables, avoiding any experimental manipulation. This method thoroughly examines the connection between AIGCF and self-regulation concerning language proficiency in standard educational environments. Correlational designs enable researchers to identify patterns of co-variation in real-world settings, offering preliminary insights into potential influences without the limitations of artificial controls. This design choice is in harmony with the current study, as it accurately mirrors the real-world dynamics found in EFL contexts in Saudi Arabia, where ethical considerations and practical constraints make experimental interventions less feasible (Mohammed, 2023). This approach highlights predictive patterns, laying the groundwork for future causal inquiries while respecting the complexities of learner experiences.

### *Participants*

This study involved 125 undergraduate students majoring in English Language and Literature, chosen from different universities across Saudi Arabia. Participants were selected through convenience sampling, emphasizing those who were easily accessible and eager to take part. This approach is often utilized in studies concerning EFL, especially when it is challenging to reach diverse populations (Riazi, 2016). This method facilitates efficient data collection; however, it restricts the capacity to generalize, as the sample may not sufficiently reflect the broader populations of EFL learners in the region. The group consisted of 64 males and 61 females, leading to a nearly balanced gender distribution. It is essential to maintain this balance in EFL research, as evidence indicates that gender may influence language learning strategies

and self-regulation. For instance, research shows that females often indicate a higher utilization of metacognitive strategies (Bouirane, 2015; Callan et al., 2016). All participants were aged between 21 and 33, aligning with the typical demographic profile of university students in Saudi Arabia. To ensure continued relevance, we required a minimum of two years of formal English instruction, as well as prior experience with online tools like language applications or platforms. This criterion focused on learners who are proficient in digital resources, enabling them to effectively explore AIGCF's predictive role in self-regulation and skill development. The process was reliably directed by ethical practices. We detailed the study's objectives, implemented confidentiality measures, and clarified the rights to withdraw. All participants provided written informed consent, adhering to the established guidelines in the field of applied linguistics research (British Association for Applied Linguistics, 1994).

### *Instruments*

This research employed a revised version of the Self-Regulation Questionnaire (SRQ) to evaluate the self-regulation of learners, drawing on the foundational work by Brown et al. (1999). The SRQ, in its original form, consists of 63 items aimed at evaluating a person's self-regulatory skills through seven key phases: collecting relevant information, comparing actions to set standards, initiating change, exploring options, formulating a strategy, implementing the strategy, and assessing the effectiveness of the plan. Participants assess each statement on a five-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5). In this study, we refined the SRQ to consist of 40 items. This method improved practicality, minimized participant fatigue, and increased relevance to higher education EFL settings. Items were removed based on two primary criteria: significant conceptual overlap with other items or limited relevance to academic self-regulation in language learning, as determined through expert consultation. The revised instrument guaranteed equitable representation of the seven phases, while omitting elements that were not in harmony with the educational and cultural context of the study. Our edition includes examples such as "I typically keep track of my progress toward my objectives" (from the monitoring stage), "If I wished to change, I believe I could achieve it" (initiating change stage), and "I feel disappointed when I fail to meet my objectives" (evaluating effectiveness stage). The modified SRQ scores range from 40 to 200, with higher scores indicating improved self-regulatory abilities. Our analysis revealed that an exploratory factor examination validated the seven-phase framework, yielding factor loadings between .62 and .85 and accounting for 68% of the variance. Additionally, the adaptation comprising 40 items exhibited excellent internal consistency, as indicated by a Cronbach's alpha of .89.

We assessed language proficiency through a test developed by researchers that aligns with the B2 level of the Common European Framework of Reference for Languages (CEFR), concentrating on reading, writing, listening, and grammar skills. The assessment comprised 40 items, featuring both multiple-choice and short-answer formats, divided into four distinct sections: reading comprehension (10 items), grammar and vocabulary (10 items), listening comprehension (10 items), and writing (scored out of 10 using a rubric). The writing rubric emphasized four essential criteria: content and relevance, which assessed clarity and the appropriateness of ideas; organization and coherence, evaluating logical structure and flow; language use, focusing on grammatical and lexical accuracy; and mechanics, addressing



spelling, punctuation, and formatting. Each criterion received a score ranging from 0 to 2.5, leading to a maximum possible score of 10 points. The overall scores varied from 0 to 40, with one point awarded for each correct answer in the objective sections and a maximum of 10 points allocated for writing tasks. A pilot test was conducted with 30 students who closely resembled our primary group, and both item analysis and expert feedback effectively validated the content. Additionally, the reliability assessments produced a Cronbach's alpha of .83, demonstrating robust internal consistency.

The third instrument, the AI-Generated Corrective Feedback (AIGCF) Scale, was a carefully crafted questionnaire intended to collect learners' perceptions, attitudes, and responses to AIGCF. The AIGCF Scale was developed to meet this requirement, drawing on insights from feedback literacy, learner autonomy, and technology-enhanced language learning. The assessment comprises 25 items categorized into three sections: Perceived Usefulness (for example, "The AI feedback helped me improve my grammar and vocabulary"), Affective Response (such as, "I felt more confident after receiving the AI feedback"), and Revising Behavior (like, "I modified my writing based on the feedback given"). Responses are evaluated on a five-point Likert scale, with 1 representing Strongly Disagree and 5 indicating Strongly Agree. Three experts in applied linguistics and educational technology assessed the scale to confirm its content validity. Following this, we carried out a pilot test with 25 EFL learners who were excluded from the main sample. Preliminary data indicate that the item-total correlations and exploratory factor analysis validated a three-factor structure, with loadings between .58 and .82, accounting for 72% of the variance. The final scale exhibited outstanding reliability, attaining a total Cronbach's alpha of .91, while the subscale values varied from .83 to .87.

#### *Data Collection and Analysis Procedures*

This study employed a non-interventional, correlational method to fulfill its objectives. Researchers gathered data in person within organized settings, employing established methodologies in the field to enhance participant comfort and ensure the reliability of responses. Before starting data collection, ethical approval was secured from the research ethics committee of the host institution. The participants received a clear summary of the study's goals, a guarantee of confidentiality for their responses, and the freedom to withdraw at any time should they wish to do so. All individuals provided their written informed consent, and the process respected cultural sensitivities in the area to foster trust and encourage participation. Data collection occurred in university classrooms or seminar rooms, where paper questionnaires were distributed alongside detailed instructions. The assessments took place over three consecutive days to promote thoughtful responses and reduce fatigue. Each day focused on a specific questionnaire, allowing participants 35 to 45 minutes to complete it at their own pace. Furthermore, a two-hour break was scheduled between sessions on the same day when needed, providing an opportunity for rest and mental refreshment. The investigator remained on-site to offer clarification when necessary and to maintain uniform conditions throughout all locations. After completion, questionnaires were quickly collected to ensure the integrity of the data. A comprehensive manual review was performed, removing any incomplete or inconsistent responses, which led to a robust dataset for analysis. Entries that fulfilled the criteria were methodically coded and input into SPSS version 26. The initial descriptive statistics offered a concise overview of essential trends, encompassing means and standard deviations. Following

this, the analysis of Pearson correlation coefficients uncovered the relationships between the variables, while multiple regression models evaluated the predictive ability of AIGCF on self-regulation and proficiency. Before performing these inferential tests, we confirmed that assumptions like normality, linearity, and homoscedasticity were validated using Q-Q plots and residual scatterplots, ensuring they met the required standards for reliable results.

## Results

This section presents the findings of the study through descriptive statistics, correlation analyses, and multiple regression analyses, aimed at exploring the relationships among AIGCF, self-regulation, and language proficiency. To address Research Questions 1 and 2, which investigate the relationships between AIGCF, self-regulation, and language proficiency, Pearson correlation analyses were conducted. Table 1 presents the descriptive statistics for the three main variables.

**Table 1**

Descriptive Statistics for AIGCF, Self-Regulation, and Language Proficiency

Variable	Mean	Std. Deviation	N
AIGCF	72.56	9.87	125
Self-Regulation	151.34	16.45	125
Language Proficiency	28.76	6.72	125

Table 1 presents the means and standard deviations for AIGCF, self-regulation, and language proficiency. Participants exhibited moderate to high levels of performance on AIGCF ( $M = 72.56$ ,  $SD = 9.87$ ), self-regulation ( $M = 151.34$ ,  $SD = 16.45$ ), and language proficiency ( $M = 28.76$ ,  $SD = 6.72$ ). The reduced standard deviation for AIGCF suggests that participants held more consistent opinions regarding AIGCF, unlike the higher variability noted in self-regulation and language proficiency. This variation showcases a broader range of self-regulatory behaviors and skill levels among the 125 undergraduate EFL students. To further investigate Research Questions 1 and 2, Pearson correlation coefficients were calculated to examine the relationships between AIGCF, self-regulation, and language proficiency. Table 2 illustrates these correlations.

**Table 2**

Pearson Correlation Coefficients between AIGCF, Self-Regulation, and Language Proficiency

	AIGCF	Self-Regulation	Language Proficiency
AIGCF			
Pearson Correlation	1	.44**	.40**
Sig. (2-tailed)	—	.001	.001
N	125	125	125
Self-Regulation			
Pearson Correlation	.44**	1	.57**



Sig. (2-tailed)	.001	—	.001
N	125	125	125
Language Proficiency			
Pearson Correlation	.40**	.57**	1
Sig. (2-tailed)	.001	.001	—
N	125	125	125

Note. \*\* $p < .001$ .

Table 2 demonstrates that significant positive correlations exist among all variables. The results indicated a moderate correlation between AIGCF and self-regulation ( $r = .44$ ,  $p < .001$ ), along with language proficiency ( $r = .40$ ,  $p < .001$ ). This indicates that students with a favorable view of AIGCF were more inclined to exhibit better self-regulatory behaviors and enhanced language skills. The significant correlation between self-regulation and language proficiency ( $r = .57$ ,  $p < .001$ ) suggests that self-regulation has a meaningful impact on language proficiency. The findings address the initial two research questions, revealing significant positive correlations between AIGCF and self-regulation, as well as between AIGCF and language proficiency, with self-regulation showing a stronger connection to proficiency. To address Research Questions 3 and 4, which investigate the relationship between AIGCF and self-regulation in relation to language proficiency and identify the more significant predictor, a multiple regression analysis was conducted. Table 3 presents the summary of the model for this analysis.

**Table 3.**

Model Summary for Multiple Regression (Predicting Language Proficiency)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.60	.36	.35	5.41

Table 3 illustrates that the relationship between AIGCF and self-regulation explains 36% of the variance in language proficiency ( $R^2 = .36$ , Adjusted  $R^2 = .35$ ), accompanied by a standard error of the estimate of 5.41. This significant effect size suggests that AIGCF and self-regulation collectively provide important insights into the variations in learners' language proficiency levels. The  $R^2$  value shows that 36% of the variability in language proficiency is explained by the combined influence of AIGCF and self-regulation, effectively addressing Research Question 3 by highlighting a notable predictive effect. Table 4 presents the ANOVA results to assess the overall significance of the regression model.

**Table 4.**

ANOVA – Regression Model Fit

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	894.75	2	447.38	15.27	.001
Residual	1581.23	122	12.96		

Total	2475.98	124
-------	---------	-----

Note. \*\* $p < .001$ .

The results shown in Table 4 underscore the considerable importance of the regression model, as indicated by an F-value of 15.27 ( $df = 2, 122, p < .001$ ). This indicates that the model, which includes AIGCF and self-regulation as predictors, successfully predicts language proficiency at levels exceeding random chance. The significant F-value strengthens the reliability of the regression model in explaining variations in language proficiency, thus addressing Research Question 3 by confirming the model's predictive ability. Table 5 outlines the individual contributions of each predictor in the regression model.

**Table 5.**

Coefficients – Predictors of Language Proficiency

Predictor	B	Std. Error	Beta	t	Sig.	95% CI for B
(Constant)	6.81	2.09		3.24	.001	[2.66, 10.96]
Self-Regulation	0.13	0.02	.46	5.82	.001	[0.08, 0.17]
AIGCF	0.09	0.03	.25	2.70	.001	[0.02, 0.16]

Note. \*\* $p < .001$ .

Table 5 shows that both self-regulation and AIGCF were identified as statistically significant predictors of language proficiency. Self-regulation emerged as the more substantial predictor ( $B = 0.13, \beta = .46, t = 5.82, p < .001$ ), indicating that for each unit increase in self-regulation, language proficiency increased by 0.13 units, with AIGCF held constant. AIGCF demonstrated a significant impact ( $B = 0.09, \beta = .25, t = 2.70, p < .001$ ), suggesting that for every unit increase in AIGCF, language proficiency increased by 0.09 units, while self-regulation stayed unchanged. The standardized beta coefficients ( $\beta = .46$  for self-regulation,  $\beta = .25$  for AIGCF) suggest that self-regulation has a more substantial impact on language proficiency than AIGCF. The findings directly address Research Question 3, showing that AIGCF and self-regulation together explain 36% of the variance in language proficiency. Furthermore, they tackle Research Question 4 by emphasizing self-regulation as the more prominent predictor. The findings emphasize the beneficial roles of learner self-regulation and the perceived efficacy of AIGCF in fostering language development, with self-regulation emerging as a more significant factor.

## Discussion

This study sought to investigate the possible predictive connection between AIGCF and self-regulation concerning language proficiency in EFL learners. The focus was on four distinct objectives. The primary aim was to assess any notable relationship between AIGCF and the self-regulation of learners. The second explored a potential connection between AIGCF and proficiency levels. The third utilized multiple regression to evaluate the combined effect of AIGCF and self-regulation on proficiency. The fourth analyzed the relative strength of these

two predictors. The results offered robust support for all objectives. The Pearson correlations for the first two questions revealed positive associations: AIGCF showed a moderate correlation with self-regulation and with proficiency. The connections made here correspond with the social cognitive framework put forth by Zimmerman (2000), in which AIGCF acts as an external cue that aids in self-monitoring and evaluation. For example, AI-derived tools motivate learners to recognize errors, modify approaches, and foster confidence, which in turn improves skills in grammar or writing. Nonetheless, the benefits may vary based on the context; in settings where teacher participation is limited, AIGCF could help rectify shortcomings but might result in a superficial comprehension if students do not delve deeper. The regression analysis conducted to address the third and fourth objectives indicated that AIGCF and self-regulation together accounted for 36% of the variance in proficiency. Self-regulation demonstrated a more substantial effect in comparison to AIGCF. This suggests that AIGCF acts as a base, but its importance depends on internal processes like planning and reflection, as described in Zimmerman's framework. The active processing of feedback is crucial for learners to make progress, emphasizing the benefits of self-regulation. However, this sharply contrasts with specific intervention studies in which the role of AI seems more direct, potentially because of a disregard for mediating factors like motivation or cultural norms in non-Western contexts. The results align with the growing body of evidence concerning the impact of AIGCF in language education. The connection between AIGCF and self-regulation corresponds with the findings of Hao et al. (2025), who found that AI-derived chatbots enhanced autonomy by enabling reflection and revision in vocabulary tasks. These tools likely promote learner autonomy by offering continuous, workload-reducing support for both educators and learners. Similarly, Barrot (2023) noted that the integration of AI with human feedback boosted engagement and refined writing skills, with AI proving especially adept at grammar correction. This study emphasizes the links between self-regulation and proficiency, supporting the notion that AI can improve cognitive and metacognitive development in EFL classrooms, as long as it is applied thoughtfully. Moreover, the results correspond with research utilizing processing models to evaluate AI feedback. Koltovskaia (2020) explored the distinctions between AI reformulations and direct corrections, emphasizing that structured AI input improves long-term accuracy while necessitating active engagement from learners for a more profound comprehension. The regression analysis highlights this point by showing that AIGCF's contribution rises in tandem with self-regulatory skills, thus aligning with theories of feedback internalization. However, criticisms arise: in Arab EFL environments, where teacher-centered practices prevail, AI has the potential to change traditional dynamics, leading to inconsistent implementation as noted in studies from Saudi contexts.

This study expands upon findings from research conducted in the Middle Eastern context of EFL, emphasizing the growing use of AI-derived tools. Almusharraf and Bailey (2023) noted that learners reported satisfaction with automated feedback on writing accuracy, reducing reliance on teachers and promoting greater independence among students. These correspond with our findings that AIGCF offers flexible, personalized assistance for skill enhancement and self-sufficiency. Asadi et al. (2025) and Ebadi and Amini (2024) found that the integration of ChatGPT with teacher input enhanced Iranian EFL writing across multiple criteria, while also highlighting the potential limitations of this combination without ethical guidelines in place.

Their work, in conjunction with ours, underscores concerns about overreliance, superficial engagement, and the dangers of plagiarism. This highlights that the success of AI is connected not just to the technology itself, but also to the self-regulation of learners and the assistance offered by institutions. In universities in Saudi Arabia, cultural elements like collectivism can amplify these challenges, requiring tailored approaches.

Zimmerman's theory from 2000 provides a clear context for these interpretations. AIGCF follows its stages: it sparks anticipation through goal prompts, improves performance with oversight, and deepens reflection through assessments. As a framework for environmental awareness, it fosters self-reflection and adaptability, encouraging individual actions to attain better outcomes. Our analyses indicate that self-regulation serves as a mediating factor in the influence of AI on proficiency. However, the theory assumes it can be universally applied; in EFL settings, the socioeconomic access to AI may skew outcomes, a factor that has not been adequately explored in this context. In conclusion, the research indicates that AIGCF has the potential to improve self-regulation and proficiency among EFL learners. Resources like ChatGPT offer instant, tailored feedback, enabling real-time revisions and clarifications that traditional methods often find challenging due to time limitations (Guo et al., 2024). This promptness fosters independence and thoughtful consideration vital for overseeing one's own learning journey. Additionally, the consistent and unbiased tone of AI can assist in reducing writing anxiety and encourage a sense of experimentation (Mohammed & Khalid, 2025; Wang, 2024). The emphasis on self-regulation in the regression highlights the promise of AI when paired with deliberate involvement from learners, as noted by Zimmerman (2000).

Although these benefits are significant, it is essential to take into account the possible downsides. Overdependence on AI may result in a shallow understanding, as students might accept corrections without grasping the fundamental concepts, potentially hindering their information retention (Wang, 2024). This aligns with the concerns raised by Ebadi and Amini (2024) about the possible erosion of critical thinking stemming from unregulated AI use, highlighting the importance of maintaining a balance with reflective practices. AI faces challenges with advanced skills like cohesion and rhetoric, providing only limited support (Fujisawa & Shintani, 2025; Henderson et al., 2025). Consequently, assistance from educators or peers is crucial, as indicated by blended approaches. Ethical concerns are important, especially when it comes to issues such as plagiarism in organizations that value originality (Cotton et al., 2024). Easy access to AI may compromise genuine revision, posing a challenge to the goals of autonomy. Educators must cultivate digital literacy and ethical understanding to effectively leverage AI, especially in varied EFL settings.

## **Conclusion**

This research provides compelling evidence within the EFL context of Saudi Arabia, demonstrating that self-regulation is essential in mediating the influence of AIGCF on language proficiency. With a progressive design, it highlights the crucial role of learner autonomy in effectively utilizing AI-derived tools. The findings offer practical and innovative implications for stakeholders in Saudi EFL education, along with new opportunities for future research.

AIGCF serves as a valuable resource for learners, improving their self-regulation and language skills. Engaging with AIGCF fosters metacognitive strategies such as goal-setting, self-monitoring, and reflective revision, which are crucial for independent learning (Wang et al.,

2025). Students in Saudi universities could improve their learning experience by incorporating AI platforms like Grammarly or Write & Improve into their structured assignments. For instance, they might set specific writing goals—such as improving sentence variety—before engaging with AIGCF, and then record their changes in reflective journals to track their progress. These practices enhance the capacity to comprehend and apply feedback efficiently, while also reducing the inclination to rely exclusively on AI for corrections. Integrating these activities into language courses enables students to boost their confidence and communication abilities, particularly in writing-focused programs common in Saudi EFL settings. Educators have the opportunity to integrate AIGCF with traditional methods, successfully addressing the considerable teaching challenges often encountered in Saudi educational environments. AI-derived tools provide timely and dependable feedback, enabling educators to focus on higher-level skills like argumentation and critical thinking (Barrot, 2023). A practical approach involves establishing hybrid feedback cycles: learners receive AIGCF for grammar and syntax, followed by discussions on revisions in peer groups or teacher-led workshops to improve understanding. To prevent excessive reliance, educators could introduce scaffolded activities, such as comparing AI and human feedback, to encourage critical engagement (Ebadi & Amini, 2024). Additionally, workshops aimed at professional development at universities in Saudi Arabia could provide educators with the necessary skills to help students comprehend AI feedback, aligning with the increasing focus on digital literacy in EFL contexts (Almusharraf & Bailey, 2023). This approach enhances teaching practices while also respecting the cultural preference for instructor-led learning in the region. Universities in Saudi Arabia could explore the integration of AIGCF platforms into their blended learning frameworks, particularly in settings with constrained resources. Investing in user-friendly AI resources and educational initiatives allows administrators to improve personalized teaching and address the diverse needs of learners. Incorporating AIGCF into platforms like Blackboard, widely used in higher education in Saudi Arabia, could improve the efficiency of feedback distribution and track student progress. To encourage ethical practices, as emphasized by Cotton et al. (2024), institutions should create clear guidelines for the incorporation of AI in academic writing, focusing on the potential risks of plagiarism. These policies align with the objectives of Saudi Arabia's Vision 2030, emphasizing the significance of technological progress in education. This study advances Zimmerman's (2000) model by illustrating the interaction of AIGCF with self-regulatory phases in digital EFL contexts. AIGCF assists in planning by offering goal prompts, enhances performance with immediate corrections, and encourages reflection by inspiring the evaluation of changes. This expands the framework to include technology as an important environmental factor, offering a comprehensive view for examining learner-AI interactions in non-Western settings.

Although the study provides important insights, it does have its limitations. The reliance on a convenience sample of Saudi undergraduate English majors limits the capacity to generalize the findings to other learner groups, such as younger students or individuals not pursuing an English major. The correlational design restricts the capacity to establish causal relationships, and the dependence on self-reported data may introduce potential bias, a concern emphasized in studies pertaining to EFL. Furthermore, the evaluation of proficiency focused exclusively on writing skills, overlooking the crucial speaking and pragmatic abilities that are necessary for a

complete grasp of language competence. The absence of qualitative insights hinders the understanding of learners' experiences with AIGCF. Future investigations may explore innovative approaches to address these shortcomings. Initially, research could employ experimental designs that include randomized control groups to investigate the causal effects of AIGCF on proficiency across different Saudi learner demographics, including secondary school students and adult learners in vocational training programs. Furthermore, utilizing mixed-methods approaches could combine surveys with interviews or think-aloud protocols to capture learners' cognitive and emotional responses to AI feedback, thus offering a more profound insight into its motivational effects. Third, longitudinal studies monitoring AIGCF utilization across semesters could reveal its enduring impact on self-regulation, particularly in under-resourced rural institutions in Saudi Arabia. Another approach involves examining AIGCF in mobile learning environments, taking into account the substantial smartphone usage in Saudi Arabia, to develop adaptive feedback systems that accommodate users on the go. In conclusion, exploring cross-cultural differences in other Gulf or Asian EFL contexts could uncover the impact of cultural factors, like collectivism, on the effectiveness of AIGCF, ultimately improving globally informed teaching practices.

### Acknowledgments

The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through Small Research Groups under grant number (RGP.2 /135 /46).

### References

- Abdulbaki, S., Khasawneh, M. A., & Tashtoush, M. A. (2025). The effectiveness of gamified learning environments in promoting grammar mastery in Jordanian secondary school EFL learners. *International Journal of Innovative Research and Scientific Studies*, 8(2), 3375-3386. <https://doi.org/10.53894/ijriss.v8i2.6013>
- Al-khresheh, M. H., Demirkol Orak, S., & Alruwaili, S. F. (2025). The development of language proficiency through global skills enhancement using Web 2.0 tools in university EFL contexts: A mixed methods quasi-experimental study. *Humanities and Social Sciences Communications*, 12(1), Article 931. <https://doi.org/10.1057/s41599-025-03476-5>
- Almusharraf, N., & Bailey, D. R. (2023). Students know best: Modeling the influence of self-reported proficiency, TOEIC scores, gender, and study experience on foreign language anxiety. *Sage Open*, 13(3), 21582440231179929. <https://doi.org/10.1177/21582440231179929>
- Alshaikhi, T., & Khasawneh, M. A. (2024). Enhancing teacher competence in differentiated instruction for English language learners with disabilities: A professional development intervention. *World Journal of English Language*, 15(1), 101. <https://doi.org/10.5430/wjel.v15n1p101>
- Alshaikhi, T., & Khasawneh, M. A. (2024). Enhancing teacher competence in differentiated instruction for English language learners with disabilities: A professional development intervention. *World Journal of English Language*, 15(1), 101. <https://doi.org/10.5430/wjel.v15n1p101>
- Asadi, M., Ebadi, S., & Mohammadi, L. (2025). The impact of integrating ChatGPT with teachers' feedback on EFL writing skills. *Thinking Skills and Creativity*, 56, Article



101766. <https://doi.org/10.1016/j.tsc.2025.101766>
- Barrot, J. S. (2023). Using automated written corrective feedback in the writing classrooms: Effects on L2 writing accuracy. *Computer Assisted Language Learning*, 36(4), 584-607. <https://doi.org/10.1080/09588221.2021.1936071>
- Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge.
- Bourane, A. (2015). Metacognitive language learning strategies use, gender, and learning achievement: A correlation study. *International Journal of English Language and Translation Studies*, 3(2), 119-132.
- British Association for Applied Linguistics. (1994). *Recommendations on good practice in applied linguistics*. British Association for Applied Linguistics.
- Brown, J. M., Miller, W. R., & Lawendowski, L. A. (1999). The self-regulation questionnaire. In L. VandeCreek & T. L. Jackson (Eds.), *Innovations in clinical practice: A source book* (Vol. 17, pp. 281–293). Professional Resource Press.
- Callan, G. L., Marchant, G. J., Finch, W. H., & German, R. L. (2016). Metacognition, strategies, achievement, and demographics: Relationships across countries. *Educational Sciences: Theory and Practice*, 16(5), 1485-1502.
- Chang, W.-L., & Sun, J. C.-Y. (2024). Evaluating AI's impact on self-regulated language learning: A systematic review. *System*, 126, Article 103484. <https://doi.org/10.1016/j.system.2024.103484>
- Cotton, D. R., Cotton, P. A., & Shipway, J. R. (2024). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching international*, 61(2), 228-239. <https://doi.org/10.1080/14703297.2023.2190148>
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge University Press.
- Du, Q. (2025). How artificially intelligent conversational agents influence EFL learners' self-regulated learning and retention. *Education and Information Technologies*, 1-67. <https://doi.org/10.1007/s10639-025-13602-9>
- Ebadi, S., & Amini, A. (2024). Examining the roles of social presence and human-likeness on Iranian EFL learners' motivation using artificial intelligence technology: A case of CSIEC chatbot. *Interactive Learning Environments*, 32(2), 655-673. <https://doi.org/10.1080/10494820.2022.2096638>
- Elmotri, B., Harizi, R., & Boujlida, A. (2025). The impact of AI-generated feedback explicitness (generic vs. specific) on EFL students' use of automated written corrective feedback. *Arab World English Journal*, 16(1), 155–170. <https://doi.org/10.24093/awej/vol16no1.10>
- Escalante, J., Pack, A., & Barrett, A. (2023). AI-generated feedback on writing: Insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, 20(1), Article 57. <https://doi.org/10.1186/s41239-023-00425-2>
- Fujisawa, Y., & Shintani, N. (2025). Comparative effects of direct written corrective feedback and AI-generated reformulation on second language learners' depth of processing and grammatical accuracy. *System*, 133, Article 103765. <https://doi.org/10.1016/j.system.2025.103765>

- Guo, S., Zheng, Y., & Zhai, X. (2024). Artificial intelligence in education research during 2013–2023: A review based on bibliometric analysis. *Education and Information Technologies*, 29(13), 16387-16409. <https://doi.org/10.1007/s10639-024-12491-8>
- Hao, C., Xu, W., Halim, H. B. A., & Hao, M. (2025). AI chatbot-assisted vocabulary learning: Relationships with self-regulation, motivation, and performance among Chinese private college students. *Language Teaching Research*, 13621688251352595. <https://doi.org/10.1177/13621688251352595>
- Havranek, G. (2002). When is corrective feedback most likely to succeed? *International Journal of Educational Research*, 37(3–4), 255–270. [https://doi.org/10.1016/S08830355\(03\)00004-1](https://doi.org/10.1016/S08830355(03)00004-1)
- Hazaymeh, W. A., & Khasawneh, M. A. (2024). Exploring the efficacy of multisensory techniques in enhancing reading fluency for dyslexic English language learners. *World Journal of English Language*, 15(1), 146. <https://doi.org/10.5430/wjel.v15n1p146>
- Henderson, M., Bearman, M., Chung, J., Fawns, T., Buckingham Shum, S., Matthews, K. E., & de Mello Heredia, J. (2025). Comparing generative AI and teacher feedback: Student perceptions of usefulness and trustworthiness. *Assessment & Evaluation in Higher Education*. Advance online publication. <https://doi.org/10.1080/02602938.2025.2302582>
- Hwang, H., Chang, X., & Sun, J. (2025). Generative AI is useful for second language writing, but when, why, and for how long do learners use it? *Journal of Second Language Writing*, 69, Article 101230. <https://doi.org/10.1016/j.jslw.2025.101230>
- Khasawneh, M. A. (2024). Academic integrity and the use of ChatGPT by EFL pre-service teachers. *Journal of Infrastructure, Policy and Development*, 8(7), 4783. <https://doi.org/10.24294/jipd.v8i7.4783>
- Khasawneh, M. A. S. (2024). Analyzing the strategic effects of AI-Powered virtual and augmented reality systems in English language education at the tertiary level. *Research Journal in Advanced Humanities*, 2024, 5(3), pp. 188–202
- Khasawneh, M. A. (2024). Adapting multisensory techniques for dyslexic learners in English language learning: A case study approach. *World Journal of English Language*, 14(5), 553. <https://doi.org/10.5430/wjel.v14n5p553>
- Khasawneh, M. A., & Shawaqfeh, A. T. (2024). Breaking traditional boundaries in translation pedagogy; Evaluating how senior lecturers have incorporated digital tools to enhance translation teaching. *World Journal of English Language*, 14(4), 154. <https://doi.org/10.5430/wjel.v14n4p154>
- Kinder, A., Briese, F. J., Jacobs, M., Dern, N., Glodny, N., Jacobs, S., & Leßmann, S. (2025). Effects of adaptive feedback generated by a large language model: A case study in teacher education. *Computers and Education: Artificial Intelligence*, 8, Article 100349. <https://doi.org/10.1016/j.caeai.2024.100349>
- Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*, 44, 100450. <https://doi.org/10.1016/j.asw.2020.100450>
- Lin, S., & Crosthwaite, P. (2024). The grass is not always greener: Teacher vs. GPT-assisted written corrective feedback. *System*, 127, Article 103529. <https://doi.org/10.1016/j.system.2024.103529>

- Mammadov, S., & Schroeder, K. (2023). A meta-analytic review of the relationships between autonomy support and positive learning outcomes. *Contemporary Educational Psychology*, 75, Article 102235. <https://doi.org/10.1016/j.cedpsych.2023.102235>
- Messer, M., Brown, N. C., Kölling, M., & Shi, M. (2024). Automated grading and feedback tools for programming education: A systematic review. *ACM Transactions on Computing Education*, 24(1), 1-43. <https://doi.org/10.1145/3636515>
- Mohammed, A. S. E. (2023). Applied Linguistics Research Articles in Saudi Arabia: A Content Analysis. *Journal of English Language Teaching and Applied Linguistics*, 5(2), 111-123. <https://doi.org/10.32996/jeltal>
- Mohammed, S. J., & Khalid, M. W. (2025). Under the world of AI-generated feedback on writing: Mirroring motivation, foreign language peace of mind, trait emotional intelligence, and writing development. *Language Testing in Asia*, 15(1), 1-26. <https://doi.org/10.1186/s40468-025-00343-2>
- Muñoz, B. C. M., Nassaji, H., & Carrillo, F. I. B. (2025). ChatGPT-generated versus human direct corrective feedback on L2 writing. *System*, 134, 103805. <https://doi.org/10.1016/j.system.2025.103805>
- Namaziandost, E. (2025). Integrating flipped learning in AI-enhanced language learning: Mapping the effects on metacognitive awareness, writing development, and foreign language learning boredom. *Computers and Education: Artificial Intelligence*, 9, 100446. <https://doi.org/10.1016/j.caeai.2025.100446>
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. <https://doi.org/10.1080/03075070600572090>
- Patra, I., Alazemi, A., Al-Jamal, D., & Gheisari, A. (2022). The effectiveness of teachers' written and verbal corrective feedback (CF) during formative assessment (FA) on male language learners' academic anxiety (AA), academic performance (AP), and attitude toward learning (ATL). *Language Testing in Asia*, 12, Article 19. <https://doi.org/10.1186/s40468-022-00169-2>
- Rezai, A., Soyoof, A., & Reynolds, B. L. (2024). Disclosing the correlation between using ChatGPT and well-being in EFL learners: Considering the mediating role of emotion regulation. *European Journal of Education*, 59(4), e12752. <https://doi.org/10.1111/ejed.12752>
- Riazi, A. M. (2016). *The Routledge encyclopedia of research methods in applied linguistics*. Routledge.
- Wang, D. (2024). Teacher-versus AI-generated (Poe application) corrective feedback and language learners' writing anxiety, complexity, fluency, and accuracy. *International Review of Research in Open and Distributed Learning*, 25(3), 37-56. <https://doi.org/10.19173/irrodl.v25i3.7646>
- Wang, W. S., Lin, C. J., Lee, H. Y., Huang, Y. M., & Wu, T. T. (2025). Enhancing self-regulated learning and higher-order thinking skills in virtual reality: the impact of ChatGPT-integrated feedback aids. *Education and Information Technologies*, 1-27. <https://doi.org/10.1007/s10639-025-13557-x>
- Wang, Y. (2024). Cognitive and sociocultural dynamics of self-regulated use of machine

- translation and generative AI tools in academic EFL writing. *System*, 126, 103505. <https://doi.org/10.1016/j.system.2024.103505>
- Wiboolyasarin, W., Wiboolyasarin, K., Suwanwihok, K., Jinowat, N., & Muenjanchoey, R. (2024). Synergizing collaborative writing and AI feedback: An investigation into enhancing L2 writing proficiency in wiki-based environments. *Computers and Education: Artificial Intelligence*, 6, Article 100228. <https://doi.org/10.1016/j.caeai.2024.100228>
- Winne, P. H., & Hadwin, A. F. (2010). Self-regulated learning and socio-cognitive theory. In P. Peterson, E. Baker, & B. McGaw (Eds.), *International encyclopedia of education* (3<sup>rd</sup> ed., pp. 503–508). Elsevier.
- Wu, J., Li, J., Ge, Z., Xu, M., Lin, L., & Zhang, R. (2025). Effectiveness of generative AI in automated written corrective feedback with prompting. *Journal of Educational Computing Research*, 63(6), 1493-1527. <https://doi.org/10.1177/07356331251359430>
- Xiao, Q., & Liu, N. (2024, November). An empirical research on AI chatbot-assisted continuation writing task. In *Proceedings of the 2024 7th International Conference on Educational Technology Management* (pp. 160–165).
- Zhang, Z., Aubrey, S., Huang, X., & Chiu, T. K. (2025). The role of generative AI and hybrid feedback in improving L2 writing skills: a comparative study. *Innovation in Language Learning and Teaching*, 1-19. <https://doi.org/10.1080/17501229.2025.2503890>
- Zhu, J., Yang, Y., & Yan, Z. (2024). Relationships between teacher feedback and English writing proficiency in Chinese students: The mediating effect of writing self-regulated learning strategies. *System*, 123, Article 103338. <https://doi.org/10.1016/j.system.2024.103338>
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press. <https://doi.org/10.1016/B978-012109890-2/50031-7>
- Zimmerman, B. J. (2015). Self-regulated learning: Theories, measures, and outcomes. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (2<sup>nd</sup> ed., pp. 541–546). Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.26060-1>

## Biodata

Adawiya T. Ahmed. Shawaqfeh- PhD in Curriculum and Instruction of English Language Teaching from Yarmouk University at Jordan. Associate Professor in the Department of Arts and Languages, Collage of English Language and Literature 2019-until now. Before that, I was Assistant Professor in the Department of Curriculum and Instruction College of Education, Umm Al-Qura University 2012-2018 (Saudi Arabia). My researches mostly about English language curriculum and Methods of teaching English Language. <https://orcid.org/0009-0003-5460-140X>

Turky Alshaikhi is an associate professor of English Language and Translation at the Languages and Translation department, University of Tabuk. His research interests are Translation Studies, Corpus Linguistics, English Semantics, and TESOL. He has published so many articles in many reputable journals. <https://orcid.org/0000-0002-3415-5743>

Being highly motivated in carrying out teaching and research in the field of Linguistics and Language Teaching, Dr. Nisar Ahmad Koka did his M.A. and Ph.D. in Theoretical and

*Sociolinguistics Linguistics from Aligarh Muslim University Aligarh, India in 1998 and 2002 respectively. He has been engaged in teaching linguistics /applied linguistics and English as a Foreign Language (EFL) in different universities/institutions for last 25 years or so. Dr. Koka has published more than two and a half dozens of research articles in different national and international journals and has also presented several papers in various conferences/seminars covering various themes and topics related to linguistics and language teaching. He has also co-authored 3 books on 'Testing and Evaluation' in Indian Languages while working as junior resource person on the projects of Multipurpose Indian Language Evaluation System (MILES) and National Testing Service (NTS) India. Dr. Koka is currently engaged as an assistant professor at the Department of English, Faculty of Languages and Translation, King Khalid University Abha, KSA teaching English as Foreign Language (EFL).*

<https://orcid.org/0000-0002-8718-3991>

*Mohamad Saleem Khasawneh holds a PhD in Special Education from Amman Arab University (2009). He is currently serving as an Assistant Professor of Special Education at King Khalid University, a position he has held since September 2015. Prior to this, he worked as an Assistant Professor at the University of Hail from 2009 to 2014. In addition to his academic roles, Dr. Khasawneh holds multiple professional certifications: he is a licensed Photosensitivity Syndrome (SSS) screener certified by the Irlen Helen Center, and a licensed examiner for the assessment and diagnosis of learning difficulties certified by the Jordanian National Institute for Learning Difficulties. He also contributes to academic publishing as a scientific advisor for Dar Al-Fikr for Publishing and Distribution in Amman, and serves as an academic scholar for Wasit University Journal. Dr. Khasawneh's expertise and contributions reflect his deep commitment to advancing research, practice, and scholarship in the field of special education.*

<https://orcid.org/0000-0002-1390-3765>