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Research Article

# MOBILE AUTO-CORRECTION AND ITS EFFECT ON EFL WRITING SKILLS: A STUDY OF SAUDI LEARNERS AT QASSIM UNIVERSITY.

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## ARTICLE INFO ABSTRACT

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#### **Keywords:**

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This mixed-methods study investigates the effectiveness of mobile autocorrection in enhancing English writing skills among Saudi EFL learners at Qassim University. Quantitative data were collected from 38 first- and second-level English majors through questionnaires, while semi-structured interviews provided qualitative insights into learners' experiences and perceptions. The study focused on widely used smartphone keyboard auto-correction tools. Findings reveal that most students perceived auto-correction as helpful for improving spelling, addressing grammatical mistakes, expanding vocabulary, and reducing common writing weaknesses. However, some participants expressed concerns about over-reliance on such tools and questioned their role in fostering long-term writing improvement and autonomous learning. These mixed perceptions highlight a key tension: while auto-correction can support accuracy and confidence in writing, it may also limit opportunities for independent error detection and self-correction. The study contributes to the limited body of research on mobile-assisted language learning in the Saudi context and forms part of a broader project that will further examine the long-term classroom impact of auto-correction tools on writing proficiency and learner autonomy. This paper is part of an ongoing research project that is currently entering a new phase of empirical data collection, utilizing auto-correction tools in practical classroom settings to assess their long-term impact on writing proficiency and learner autonomy.

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#### 1. Introduction

The digital age, driven by rapid technological advancements, has transformed the way students learn and acquire languages. Among these innovations, mobile technology has become one of the most influential educational advancements, particularly through the widespread use

of smartphones. University students worldwide, including those in Saudi Arabia, use smartphones daily for communication, learning, and accessing information (AlTawil, 2018). While this extensive use offers clear advantages for English as a Foreign Language (EFL) learning, it also poses challenges, especially when mobile devices are employed for writing and language development.

One increasingly common feature of mobile devices is the auto-correction tool, embedded in smartphone keyboards and writing applications. Originally designed to improve the speed and accuracy of digital communication, auto-correction now plays a role in educational contexts. It instantly detects and corrects spelling and grammar errors, exposing learners repeatedly to accurate language forms (Godwin-Jones, 2018). Recent studies have shown that auto-correction and grammar checkers not only enhance linguistic precision but also encourage learner motivation and self-directed learning (Zhang & Hyland, 2018).

However, the pedagogical use of auto-correction remains a topic of debate. On the one hand, instant feedback supports error awareness and language internalization (Bitchener & Ferris, 2012). On the other hand, critics argue that over-reliance on such tools can reduce learners' ability to self-edit and limit their autonomous development (Vyatkina, 2020). This tension is particularly relevant in EFL contexts, where students may lean heavily on corrective tools without fully understanding the underlying linguistic rules.

Mastering writing in a second or foreign language is already one of the most demanding tasks for learners. It requires precision in vocabulary, grammar, and syntax, as well as the ability to organize ideas into coherent discourse (Hyland, 2016). In Saudi Arabia, EFL students often struggle with vocabulary selection, grammatical accuracy, and cohesion in their writing (Al-Sobhi & Preece, 2018). Mobile writing tools with auto-correction offer potential scaffolding support, but little research has explored how Saudi learners perceive these tools or whether they contribute to sustained improvements in writing proficiency.

This study addresses this gap by examining the dual dimensions of mobile auto-correction: its effectiveness in enhancing English writing performance and its influence on learner perceptions. Using a mixed-methods design, the research draws on quantitative data from questionnaires and qualitative insights from semi-structured interviews with 38 Saudi English majors at Qassim University. By focusing on real-world student experiences, this study contributes to the growing field of mobile-assisted language learning (MALL) and offers insights for teachers and researchers into the role of digital corrective tools in EFL writing instruction.

## 2. Research Questions

To achieve these objectives, the study addresses the following questions:

- 1. How do Saudi EFL learners perceive the use of mobile auto-correction in their writing practices?
- 2. To what extent does mobile auto-correction support improvements in spelling, grammar, vocabulary use, and overall writing proficiency?
- 3. What are the potential benefits and drawbacks of relying on mobile auto-correction for long-term writing development and learner autonomy?

#### 3. Literature review

## 3.1 Mobile Auto-Correction, MALL, and EFL Writing Development

Mobile-assisted language learning (MALL) has emerged as a significant branch of applied linguistics, leveraging mobile technology to enhance language learning. Smartphones, in particular, have reshaped learning practices, being both widely accessible and deeply integrated into students' academic and personal lives (Lekamge & Smith, 2025). Autocorrection, a built-in feature of most mobile devices, functions almost unnoticed by users, yet has emerged as a central element of "pervasive mobile learning" (Kukulska-Hulme, 2020). By providing immediate corrective feedback, these tools have the potential to foster learner engagement and fluency (Burston, 2015; Miangah & Nezarat, 2012).

Research shows that auto-correction has notable linguistic impacts, particularly at the surface level. Studies consistently report improvements in spelling and punctuation accuracy. For example, Ismael et al. (2022) found that students at Sulaimaniyah University reduced basic writing errors when using mobile auto-correction, while Lekamge and Smith (2025) documented gains in spelling and sentence organization among ESL learners drafting with Microsoft Word compared to handwritten tasks. These findings align with Schmidt's *Noticing Hypothesis*, which suggests that learners must consciously notice errors to internalize correct forms. Auto-correction may support this process by highlighting surface-level mistakes.

Yet, literature also highlights potential drawbacks. Truscott's (1996) early critique of error correction remains relevant: surface-level corrections may have limited long-term value. More recent studies caution that heavy reliance on auto-correction can undermine learners' ability to self-edit and internalize grammar rules (Lekamge & Smith, 2025). Similarly, Elmotri et al. (2025) demonstrated that advanced writing correction tools (AWCF), such as Grammarly, reduce surface errors but fail to improve higher-level aspects of writing, including coherence, argumentation, and rhetorical development.

#### 3.2 Students' Attitudes and Perceptions of Auto-Correction

Students generally report favorable attitudes toward auto-correction, appreciating its convenience, immediacy, and ability to reduce writing-related anxiety. For instance, Elmotri et al. (2025) observed that students using Grammarly felt less stress during revision, while Ismael et al. (2022) noted that learners gained confidence when correcting spelling errors. These emotional and motivational benefits contribute to learners' persistence in writing tasks.

Nevertheless, perceptions remain nuanced. More advanced users often express concerns about over-reliance on such tools. According to Lekamge and Smith (2025), some students feared that frequent use would mask their weaknesses and limit their ability to detect and correct errors independently. Others doubted whether auto-correction genuinely contributed to long-term linguistic development, particularly in terms of grammar and discourse-level writing skills.

#### 3.3 Synthesis and Gaps in Literature

Taken together, the literature suggests that mobile auto-correction supports accuracy in spelling and basic grammar while offering motivational benefits. However, its effects on higher-order writing skills and learner autonomy remain inconclusive. Previous studies are often limited by small sample sizes, a focus on short-term outcomes, and a lack of longitudinal

evidence. This creates a research gap in understanding whether auto-correction fosters sustained improvements in writing proficiency, especially in EFL contexts such as Saudi Arabia, where learners face persistent challenges in vocabulary, grammar, and discourse organization (Al-Sobhi & Preece, 2018).

This study addresses these gaps by examining both the linguistic effects and the learner perceptions of mobile auto-correction among Saudi EFL students, with attention to its potential role in supporting—not replacing—autonomous learning and long-term writing development.

## 4. Methodology

#### 4.1 Research Design

This study employed a mixed-methods design, combining quantitative and qualitative approaches to assess the effectiveness of mobile auto-correction in enhancing English writing skills among EFL learners, as well as their perceptions of the tool. Following Creswell and Plano Clark (2018), the design was selected to provide both breadth and depth: quantitative data established general trends, while qualitative data offered nuanced insights into learner experiences. A structured questionnaire was used for quantitative data collection, and semi-structured interviews were employed to elicit detailed perspectives.

# 4.2 Participants

The participants were 38 undergraduate English-major students enrolled in the first two levels of the program at Qassim University. Their proficiency levels were consistent with students who have completed foundational English language coursework. All participants were native Arabic speakers and volunteered to join the study after being fully informed about its objectives and procedures. They represented a range of backgrounds in terms of familiarity with mobile technology and prior experience with digital writing tools.

# **4.3 Data Collection Instruments**

## 4.3.1 Questionnaire

The primary quantitative instrument was a structured questionnaire comprising 30 items, divided into two sections. The first section examined students' views on the effectiveness of mobile auto-correction in enhancing spelling, grammar, vocabulary, and overall writing development. The second section assessed learner perceptions of tool usage, including their confidence in writing and degree of reliance on auto-correction for academic tasks. Responses were measured using a five-point Likert scale (from *strongly disagree* to *strongly agree*). The instrument was piloted for clarity and tested for reliability before being administered fully.

#### 4.3.2 Semi-Structured Interviews

To complement the questionnaire data, semi-structured interviews were conducted with a sub-sample of participants. The interview guide included open-ended questions focusing on learners' experiences with auto-correction, its perceived impact on their writing skills, their levels of confidence in independent writing, and their concerns about technological dependence. Interviews were conducted in either English or Arabic, according to the student's preference, and then transcribed. When necessary, the transcripts were translated into English

for analysis. The format allowed flexibility for follow-up questions while maintaining consistency across participants.

# 4.4 Data Analysis

Quantitative data were analyzed using SPSS V.25 to generate descriptive statistics (frequencies and percentages), which revealed overall patterns in learner perceptions of mobile auto-correction. For qualitative data, a thematic analysis was conducted following Braun and Clarke's (2006) six-phase approach. This involved familiarization, initial coding, theme development, reviewing, defining, and reporting. Key themes included writing improvement, learner autonomy, motivation, and tool dependence. The integration of quantitative and qualitative findings provided a more comprehensive understanding of the phenomenon, enhancing the validity of the interpretations.

## 4.5 Ethical Considerations

The study adhered to established ethical standards. All participants were informed of the study's aims and assured of confidentiality. They were reminded of their right to withdraw at any stage without penalty. All collected data were anonymized during analysis and reporting to protect participant identity.

#### 5. Results and Discussion

# 5.1 Effectiveness of Auto-Correction in Improving Writing Skills

Table 1. Perceived Effectiveness of Auto-Correction (N=38)

Items	Strongly	Agree	Not	Disagree	Strongly
	Agree		Sure		Disagree
Overcome areas of	42.9%	35.7%	8.7%	2%	10.7%
weakness					
Improve my spelling	28.6%	39.3%	17.9%	10.7%	3.6%
Improve my grammar	13.4%	28.6%	35.7%	14.3%	7.1%
Structure my writings better	28.6%	39.3%	10.9%	13.4%	7%
Make my writing more	39.3%	39.3%	14.3%	5.1%	2%
comprehensible					
Diversify in choice of words	35.7%	21.4%	28.6%	10.4%	3%
Improve writing skills	28.6%	42.9%	5.1%	13.4%	9.1%
greatly					

*Note:* N=38 *undergraduate EFL students* 

#### **5.1.1 Overcoming Areas of Weakness**

The data reveals that 78.6% of students (42.9% strongly agree + 35.7% agree) believe that auto-correction helps them overcome areas of weakness in their writing. This represents the highest positive response rate among all effectiveness measures, suggesting that students view auto-correction as a comprehensive tool for addressing their writing deficiencies. In the interview, student 3 reflected this sentiment: "I realized I was making the same mistakes over and over before using auto-correction. It pointed them out immediately, and now I feel like I've

made a lot of improvement. The tool helps me see my weak points that I never noticed before." Moreover, Student 7 added, "Auto-correction is like having a personal teacher with me all the time. It catches the mistakes I make repeatedly and helps me understand what I'm doing wrong."

67.9% of students reported that auto-correction improved their spelling abilities (28.6% strongly agreed and 39.3% agreed). This finding is particularly significant for EFL learners, as spelling represents a fundamental challenge when transitioning between different orthographic systems. Student 8 explained the spelling benefits: "I used to struggle with spelling, but now I learn as I write. The suggestions stick in my memory, and I find myself spelling words correctly even when I'm not using auto-correction." Student 5 noted: "Before using auto-correction, I would spend so much time looking up spellings in the dictionary". Similarly, student 1 said, "Now I can focus on my ideas because I know the spelling will be corrected automatically."

Grammar improvement showed more modest results, with 42% of students reporting positive effects (13.4% strongly agreed and 28.6% agreed), while 35.7% remained uncertain. This pattern suggests that while auto-correction provides some grammatical support, its impact on complex grammatical structures may be limited. Student 6 explained that "Auto-correction helps with basic grammar like verb forms and articles, but it doesn't always catch the more complex grammar mistakes. Still, it's better than nothing." Student 2 commented: "I notice that my grammar has improved a little bit, especially with simple things like subject-verb agreement. But I still need to learn the grammar rules myself."

Regarding writing structure, 67.9% of students indicated improvement (28.6% strongly agreed and 39.3% agreed), suggesting that auto-correction influences not only surface-level corrections but also the organizational aspects of writing. Student 2 elaborated: "It has helped me organize my thoughts better. My sentences are now more logical and well-structured. I think because I'm not worried about small mistakes, I can focus more on organizing my ideas." Student 4 added: "When I don't have to worry about spelling and simple grammar, I can think more about how to arrange my sentences and make my writing flow better."

The most significant positive response was for writing comprehensibility, with 78.6% of students reporting improvement (39.3% strongly agreed and 39.3% agreed). This finding suggests that auto-correction contributes to the production of more reader-friendly texts. Student 4 explained that "I feel my writing is clearer and easier for others to understand. Auto-correction makes me aware of the mistakes I wouldn't notice on my own, so my writing becomes more professional and clearer.". Student 9 noted, "My professors have commented that my writing is becoming clearer. I think it's because auto-correction helps me avoid the small errors that used to make my writing confusing."

For vocabulary choice diversification, 57.1% of students reported positive effects (35.7% strongly agreed and 21.4% agreed), while 28.6% remained uncertain. This suggests that auto correction's vocabulary enhancement features have moderate effectiveness. Student 8 observed: "Each time I write the same word I wrote before, auto-correction suggests another synonym for it. This has helped me learn new words and make my writing more interesting." Student 3 added, "I like how it suggests different words when I repeat myself. It's teaching me new vocabulary that I can use in my other writings too."

71.5% of students responded positively (28.6% strongly agreed and 42.9% agreed), indicating that students perceive auto-correction as contributing to their overall writing

development. Student 6 summarized, "The tool taught me how to correct my errors and made me more confident in my writing. I feel my sentences are clearer now, and my overall writing ability has improved."

#### 5.2 Student Attitudes Toward Auto-Correction Features

Table 2. Student Attitudes Toward Auto-correction (N=38)

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
I prefer to use auto-correction to learn writing	28.6%	32.1%	17.9%	15.9%	5.9%
Writing using auto-correction makes me feel more comfortable	39.3%	46.4%	7.1%	4.1%	3%
My desire to write increased by using autocorrection	21.4%	50%	21%	3.6%	3.6%
By using autocorrection, I managed to avoid common mistakes	39.3%	50%	3.6%	3.6%	3.6%
Mobile phones have the necessary tools that encourage me to write	14.3%	42.9%	21.4%	17.9%	3.6%
Using auto-correction made me less anxious about making writing mistakes	28.6%	53.6%	7.1%	5.1%	5.6%
Using auto-correction in writing saves time	35.7%	50.1%	3.1%	4%	7%

*Note: N*=38 undergraduate EFL students

The data shows that 60.7% of students prefer using auto-correction for learning writing (28.6% strongly agree + 32.1% agree), while 21.8% disagree or strongly disagree. This indicates a generally positive attitude toward incorporating auto-correction into the learning process, though with some reservations. Student 9 expressed this preference: "I prefer using auto-correction because it's like having a guide with me while I write. It makes the process smoother, and I feel like I'm learning while I write.". However, Student 7 showed some uncertainty: "I like using it, but sometimes I worry that I'm becoming too dependent on it. I want to learn to write well on my own, too."

A substantial 85.7% of students reported feeling more comfortable when writing with auto-correction (39.3% strongly agreed and 46.4% agreed). This high percentage suggests that auto-correction significantly reduces writing anxiety and creates a more supportive writing environment. Student 6 articulated this comfort: "I feel more confident writing because I know the tool will catch my mistakes. I'm less hesitant to write now, and I can express my ideas more freely." Student 5 added, "Before using auto-correction, I felt nervous about others judging my mistakes. Now, I feel less pressure to write, and I can focus on my ideas instead of worrying about errors."

The results indicate that 71.4% of students experienced an increased desire to write when using auto-correction (21.4% strongly agree + 50% agree). This motivational benefit is particularly valuable for EFL learners who often avoid writing practice due to fear of making errors. Student 3 explained the motivational impact and said, "Using auto-correction encourages me to write more. I don't feel scared to make mistakes because I know it will correct them. This makes writing feel less stressful and more enjoyable." Student 8 noted: "I used to avoid writing assignments because I was afraid of making too many mistakes. Now I look forward to writing because I know I have support."

An impressive 89.3% of students agreed that auto-correction helped them avoid common mistakes (39.3% strongly agreed and 50% agreed). This represents one of the highest positive response rates, indicating that students recognize the error prevention benefits of auto-correction. Student 7 emphasized this benefit by saying, "I no longer worry about basic mistakes because auto-correction catches them for me. It's like having a teacher on hand all the time to prevent me from making silly errors." Student 1 added, "The tool helps me avoid the same mistakes I used to make over and over. It's like it remembers my common errors and fixes them automatically."

Regarding mobile phones as writing encouragement tools, 57.2% of students responded positively (14.3% strongly agreed and 42.9% agreed), while 21.5% disagreed. This moderate positive response suggests that while many students appreciate mobile writing support, not all view smartphones as primary writing tools. Student 4 commented: "Having auto-correction on my phone means I can write anywhere and anytime without worrying about making mistakes. It makes writing more convenient and accessible." Student 2 observed: "I like that I can use auto-correction on my phone for quick writing tasks, but for serious academic writing, I still prefer using a computer."

A significant 82.2% of students reported that auto-correction reduced their anxiety about making writing mistakes (28.6% strongly agreed and 53.6% agreed). This anxiety reduction represents a crucial psychological benefit that can facilitate increased writing practice and engagement. Student 5 described the anxiety reduction: "Before using auto-correction, I felt nervous about others judging my mistakes. Now, I feel less pressure to write because I know most of my errors will be caught and corrected." Similarly, Student 9 said, "I used to spend so much time worrying about whether I was making mistakes that I couldn't focus on my ideas. Auto-correction has made writing much less stressful for me."

The statement "Using auto-correction in writing saves time" received strong positive responses, with 85.8% of students agreeing that auto-correction saves time (35.7% strongly agreed and 50.1% agreed). This efficiency gain allows students to focus on higher-order writing concerns rather than mechanical corrections. Student 1 highlighted the time benefits: "It saves so much time! I don't have to rewrite my drafts over and over to correct small errors. I can focus on improving my content and ideas instead." Student 6 noted: "I used to spend hours checking my spelling and grammar. Now I can use that time to think about better ways to express my ideas and organize my writing."

The findings reveal that while students generally hold positive attitudes toward autocorrection features, there are varying degrees of enthusiasm and some concerns about dependency. The highest positive responses were for comfort (85.7%), error avoidance (89.3%), and timesaving (85.8%), while the lowest was for mobile phone encouragement (57.2%), suggesting that students value the functional benefits of auto-correction but may have reservations about complete reliance on mobile technology for academic writing.

#### 6. Discussion

This study investigated the effectiveness of mobile auto-correction in enhancing EFL writing skills and examined students' perceptions of its use. The integration of quantitative and qualitative findings shows that Saudi English-major students at Qassim University generally hold positive views of auto-correction, particularly for addressing surface-level errors, enhancing comprehensibility, and reducing writing anxiety. At the same time, concerns about over-reliance reveal the dual role of auto-correction as both a support mechanism and a potential barrier to autonomy. These findings not only confirm existing research on Mobile-Assisted Language Learning (MALL) but also extend it to the Saudi EFL context, where writing difficulties remain a significant pedagogical challenge (Al-Sobhi & Preece, 2018).

# **6.1 Effectiveness in Writing Improvement**

A majority of students (78.6%) reported that auto-correction helped them overcome writing weaknesses and improve the comprehensibility of their writing. These outcomes reinforce earlier findings that mobile tools enhance surface-level accuracy and clarity (Ismael et al., 2022; Lekamge & Smith, 2025). Importantly, students in this study recognized these improvements as meaningful to their academic writing, indicating that auto-correction may act as a form of scaffolding that supports ongoing language development.

Spelling showed particularly strong gains (67.9%), confirming prior evidence that repeated exposure to corrected forms can promote retention. This supports Schmidt's (1990) *Noticing Hypothesis*, which emphasizes the importance of conscious awareness in language internalization. Students reported that corrected spellings "stuck" in memory, suggesting that auto-correction may facilitate long-term orthographic competence.

By contrast, the improvement in grammar was less conclusive: while 42% perceived positive effects, over one-third remained uncertain. This reflects limitations identified by Truscott (1996) and Vyatkina (2020), who argued that automated systems address mechanical errors but fall short in developing complex grammatical competence. In line with these critiques, students noted that while auto-correction handled basic issues (e.g., subject—verb agreement, articles), it did little for advanced syntactic structures, underscoring the continued need for explicit grammar instruction.

Writing structure (67.9%) and vocabulary diversity (57.1%) were also seen as areas of improvement. These findings partially support Elmotri et al. (2025), who observed that automated tools can indirectly contribute to textual cohesion and lexical variety. However, students' uncertainty about long-term lexical benefits highlights the limited depth of autocorrection's vocabulary support, which suggests that teacher scaffolding remains necessary to consolidate gains.

## **6.2 Student Attitudes and Engagement**

Students' affective responses were overwhelmingly positive. Most felt more comfortable (85.7%) and less anxious (82.2%) when writing with auto-correction, confirming Godwin-Jones's (2018) assertion that automated feedback reduces writing apprehension. These results

demonstrate that auto-correction provides not only cognitive but also affective scaffolding, encouraging students to write more freely and more often.

Motivational effects were also evident: 71.4% of students reported an increased desire to write, consistent with Burston (2015) and Miangah & Nezarat (2012), who highlighted how MALL fosters engagement through immediate, non-threatening feedback. The strongest endorsement (89.3%) concerned the avoidance of repeated errors. This echoes Baldwin and Chai's (2012) findings that autocorrection systems improve textual consistency and raise learners' awareness of recurrent mistakes—an important precursor to autonomy if accompanied by reflective practice.

Nonetheless, some reservations emerged. While 60.7% preferred to use auto-correction to support writing, a notable minority feared dependency. This reflects long-standing concerns (Truscott, 1996; Kukulska-Hulme, 2020) that uncritical reliance on automated feedback may hinder self-editing and independent error recognition. Student reflections in this study confirm this tension: although auto-correction improved their output, some worried it reduced their initiative to internalize grammatical rules.

Interestingly, only 57.2% of students agreed that mobile phones themselves encourage writing. This ambivalence suggests that while learners value the *functionality* of autocorrection, they do not necessarily perceive smartphones as complete academic writing platforms. This aligns with Elmotri et al. (2025) and reflects the Saudi educational context, where students often prefer computers for formal academic writing (Al-Sobhi & Preece, 2018).

Finally, the strong consensus that auto-correction saves time (85.8%) reinforces the practical value of the tool. By reducing the time spent on mechanical corrections, students could focus on higher-order concerns such as planning and content development, consistent with Baker and Kinzer's (1998) findings on word processors.

# 7. Conclusion and Implications

This study set out to explore the effectiveness of mobile auto-correction in enhancing English writing skills among EFL learners at Qassim University, as well as to investigate students' perceptions and attitudes toward its use. By employing a mixed-methods approach—utilizing both questionnaires and semi-structured interviews—the research provided a holistic understanding of how Saudi English-major students interact with and respond to auto-correction features in their everyday writing practices.

The findings confirm that mobile auto-correction tools, particularly those embedded in smartphones, play a significant role in facilitating EFL writing development. Quantitative data revealed that students perceived auto-correction as most effective in improving spelling, making their writing more comprehensible, and helping them overcome weaknesses. Additionally, many reported improved structure and vocabulary use, though the effects on grammar development were more modest. These results are consistent with prior literature (e.g., Ismael et al., 2022; Lekamge & Smith, 2025), which has shown that auto-correction is particularly effective for addressing surface-level writing issues such as spelling and punctuation.

Student attitudes further reinforced the tool's perceived value. A substantial majority of students expressed comfort, increased motivation, and reduced anxiety when writing with auto-correction support. The tool was seen not only as a corrective mechanism but also as a source

of confidence and encouragement for continued writing practice. However, some students expressed concern about developing dependency on the tool, reflecting the complexity of balancing technology use with autonomy in language learning. This nuanced perspective aligns with existing warnings in the literature (Truscott, 1996; Kukulska-Hulme, 2020) about the risks of relying too heavily on automated tools without engaging in deeper cognitive or linguistic processing.

The study's findings carry important pedagogical implications. First, mobile auto-correction tools should be viewed as supportive learning aids, not as replacements for teacher feedback or grammar instruction. While these tools offer immediate correction and convenience, they often fail to address the deeper layers of writing, such as organization, cohesion, and argumentation. Therefore, educators should incorporate auto-correction as a component within a broader instructional framework that includes explicit grammar instruction, peer review, and opportunities for self-editing.

Second, teachers should actively guide students in using auto-correction tools reflectively. For instance, when a correction is suggested, learners can be encouraged to ask why the correction was made and whether it aligns with the grammar or vocabulary rules they've learned. This reflective practice can help mitigate over-reliance and promote metalinguistic awareness. Incorporating short activities that connect auto-correction with grammar exercises or vocabulary building could further reinforce this goal.

Third, institutions may consider integrating digital literacy components into EFL writing curricula, particularly focusing on the benefits and limitations of writing technologies. This includes helping students critically evaluate when and how to use tools like auto-correction and encouraging a balanced approach that values both digital tools and foundational language knowledge. Such training is especially important for novice learners who may not yet possess the analytical skills to distinguish between helpful corrections and potentially misleading ones.

Finally, the results suggest that mobile auto-correction can be a powerful motivational tool. By reducing writing anxiety and saving time, it can create a more positive and accessible writing environment for EFL students. This opens the door to increased writing frequency and engagement, which are critical for language development. However, for this motivational benefit to translate into long-term learning outcomes, it must be supported by pedagogical strategies that foster autonomy, critical thinking, and self-correction skills.

## 8. Limitations and Future Directions

While the study provided valuable insights, it is not without limitations. The sample size was limited to 38 students from a single university, which may affect the generalizability of the results. Additionally, the study focused primarily on students' perceptions and self-reported experiences; future research may benefit from analyzing actual writing samples over time to assess measurable improvements in writing quality. Longitudinal studies could also explore whether the observed benefits persist once the tool is removed, thereby testing the extent of language internalization.

Further research should also investigate how different types of auto-correction tools (e.g., basic smartphone features vs. advanced AI platforms like Grammarly) compare in effectiveness and how these tools might interact with students' language proficiency levels, writing goals, and personal learning strategies.

In conclusion, mobile auto-correction tools offer substantial support for EFL learners in writing, particularly in reducing common mechanical errors and building confidence. Students view these tools positively, recognizing their practical benefits while also acknowledging potential drawbacks. To maximize their impact, these tools should be integrated into writing instruction thoughtfully and strategically, complemented by reflective teaching practices and a strong focus on language awareness. With balanced use, mobile auto-correction can enhance not only students' written output but also their overall language learning experience.

#### References

- Al-Tawil, K. M. (2018). Social media and mobile app usage in Saudi Arabia. Journal of King Saud University-Computer and Information Sciences, 30(3), 330-338. CITC. (2020). Statistical report: Telecommunications and information technology in the Kingdom of Saudi Arabia.
- Baldwin, T., & Chai, J. Y. (2012). Autonomous self-assessment of autocorrections: Exploring text message dialogues. In *Proceedings of the 2012 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (pp. 710–719). Association for Computational Linguistics. https://aclanthology.org/N12-1089.pdf
- Bitchener, J., & Ferris, D. R. (2012). Written corrective feedback in second language acquisition and writing. Routledge. https://doi.org/10.4324/9780203832400
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Burston, J. (2015). Twenty years of MALL project implementation: A meta-analysis of learning outcomes. *ReCALL*, 27(1), 4–20. https://doi.org/10.1017/S0958344014000159
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
- Elmotri, B., Boudjelal, A., & Jarrar, H. (2025). The impact of AI-generated feedback explicitness on EFL students' use of automated written corrective feedback. *Arab World English Journal*, 16(1), 384–402. https://doi.org/10.24093/awej/vol16no1.25
- Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology*, 22(3), 1–17. https://www.lltjournal.org/item/2857
- Ismael, K. O., Ahmed, N. H., & Aziz, F. N. (2022). Effects of auto-correction on students' writing skills at three different universities in Sulaimanyah city. *Arab World English Journal (Special Issue on CALL)*, 8, 231–245. https://doi.org/10.24093/awej/call8.17
- Kukulska-Hulme, A. (2020). Mobile-assisted language learning [MALL]: Affordances and pedagogical approaches. *Language Learning & Technology*, *24*(2), 1–17. https://www.lltjournal.org/item/3136

- Lekamge, R., & Smith, C. (2025). Impact of auto-correction features in text-processing software on the academic writing of ESL learners. *ELOPE: English Language Overseas Perspectives and Enquiries*, 22(1), 69–91. https://doi.org/10.4312/elope.22.1.69-91
- Miangah, T. M., & Nezarat, A. (2012). Mobile-assisted language learning. *International Journal of Distributed and Parallel Systems*, *3*(1), 309–319. https://doi.org/10.5121/ijdps.2012.3126
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. https://doi.org/10.1093/applin/11.2.129
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327–369. https://doi.org/10.1111/j.1467-1770.1996.tb01238.x
- Vyatkina, N. (2020). Learner corpora in language teaching. *Language Teaching*, *53*(4), 491–526. https://doi.org/10.1017/S0261444819000016
- Zhang, Z., & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, *36*, 90–102. https://doi.org/10.1016/j.asw.2018.02.004

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