

## *Original Paper*

# The Use of Online Automated Writing Checkers among EFL Learners

Enas Abdelwahab Eltom RahmtAllah<sup>1</sup>

<sup>1</sup> Assistant Professor of Curriculums and Instruction of English Language Teaching, English Department, College of Sciences and Arts, Unaizah, Qassim University, KSA

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### ***Abstract***

*Writing is regarded as a vital learning tool for all subject areas. However, it is tough for EFL students in college programmes to grasp and possess excellent writing skills. This paper describes the findings of a study conducted to understand better EFL learners' perceptions of using online automated writing checkers (OAWCs). This study aims to elicit Learners' perspectives on enhancing their writing skills with OAWCs. A questionnaire was provided to sixty Saudi female students in the College of Science and Arts, Unizah, Qassim University. The results demonstrate the learners' positive perceptions of the use of these technologies. Based on the findings, educational implications are proposed for this descriptive study and future research.*

### ***Keywords***

*EFL, online, writing checker, automated*

## **1. Introduction**

Writing well is a critical skill for enhancing academic and occupational success. However, this skill is difficult to perfect due to its complexity. Writing ability is not only the words on the page; it is the successful transmission of complicated concepts in their purest form (Phuket & Othman, 2015; RahmtAllah, 2020; Fitria, 2021). In addition to students, teachers face challenges when teaching writing. Both students and teachers have found that writing skills are more complex and time-consuming than learning any other language skill (Ahmed, 2010). Blanchard and Root (2003) mentioned that Writing in our language might be challenging. When writing in a new language, it might become more complex. Students of English as a Foreign Language in higher education are expected to have the ability to create academic writing, which calls for specialised competencies. They must write in an official English version and converse with various text formats. Despite this, many

students of English as a foreign language write mainly in grammar. Students who struggle with linguistic issues may need help fulfilling the requirements of their schools and colleges (Amiri & Puteh, 2017; Ghufroon & Rosyida, 2018; Yang, 2018; Palermo & Thomson, 2019; Perdana & Farida, 2019). Most academic language and learning advisors concur that students' mastery of grammar and punctuation is, at best, rudimentary. However, mastering these fundamental abilities is vital for quality writing and academic achievement (Narita, 2012; Fahmi & Rachmijati, 2021). Writing requires attention to detail concerning grammatical structure, punctuation, capitalisation, and spelling. They are needed to improve the readers' overall understanding. Writing with accurate grammar may assist writers in delivering a clear and concise message to their audiences, facilitating effective two-way communication between authors and their audiences. Because grammar is concerned with the structure and forms of words and the order of sentences, it is essential to the writing process. As a result, checking for grammar errors and editing one's work become crucial components of learning writing skills (Thao & Anh, 2017; Gain et al., 2019; Perdana & Farida, 2019). As a result of the Coronavirus disease (COVID-19), education has undergone significant changes with the advent of e-learning, in which instruction is conducted remotely and via digital platforms (RahmtAllah & Mohamedahmed, 2021). Furthermore, Due to the limited time available during the student-adviser interaction, Academic Language and Learning (ALL) counsellors may need help to offer students detailed feedback on their writing mistakes. One way is to use online writing-checking tools to supplement an advisor's comments (Woodworth & Barkaoui, 2020). Online writing-checking tools use artificial intelligence developed by computational linguistics. In other words, online writing-checking tools are powered by an interconnected system that incorporates rules, developments, and techniques of artificial intelligence, such as machine learning, deep learning, and the processing of natural languages. An artificial intelligence device simulates the way a person will execute a task. These technologies can save time and resources for academic advisors while also enabling more meaningful self-directed learning and increasing students' self-efficacy. Online grammar checkers are online applications that facilitate writing-related grammar checking. The majority of them also have correct spelling and grammar. Some can even go beyond simple correction by examining contextual errors, word selection, and plagiarism. These tools allow authors to quickly and precisely repair typos. The diverse internet writing checkers are commercially accessible. While some programmes still need a monthly fee to use all of their features, others allow free access, while others offer free and paid choices with varying perks (Fitria, 2021). Online writing-checking tools could also save advisors time and resources while developing students' self-efficacy and enabling more significant self-directed learning (Cavaleri & Dianati, 2016; Thi & Nikolov, 2022). Online writing checkers help students improve their writing because those tools enable them to teach themselves multiple ways to represent a concept. By using online writing checkers, the learners focus on expressing their thoughts instead of demonstrating competence in spelling, punctuation, and grammar conventions (Mammadova, 2019). These tools are utilised not only to verify the writing produced by learners but also to assess it. Automated writing evaluation (AWE) has gained

importance in recent years and has become increasingly popular in the assessment of writing (Lin, Lin, & Tsai, 2020; Li, 2021). Automated writing evaluation is a form of assessment for learning that combines automated essay scoring and automated feedback to assist students in improving their writing performance. This type of assessment for learning supports improvements in students' overall writing performance (Palermo & Thomson, 2019).

Numerous types of research on Automated Writing Programs mainly focused on the outcomes of the students writing and the comparison of different programmes. However, inadequate research examines the students' perceptions of using these programmes (Fahmi & Cahyono, 2021). The paper attempts to throw some light on some common perceptions of using online automated writing checkers experienced by EFL learners at Qassim University. This study aims to contribute to this growing research by exploring EFL learners' perceptions of using OAWCs. This paper seeks to answer the following questions:

1. What general perception do learners have towards improving their writing skills through OAWC?
  - a. Do learners think that OAWCs are useful in improving their writing skills?
  - b. Do learners think that OAWCs motivate them to improve their writing skills?
2. What problems and difficulties do learners encounter when they use OAWCs to improve their writing skills?

## 2. Literature Review

In response to concerns about the significance of writing quality in higher education, many studies have studied how technology is utilised to boost language learning among students. Although users of Microsoft Word (MS Word) can recognise and repair minor spelling and grammatical faults, the program's powers are limited to highlighting problematic areas of the document with some alternative replacements; however, instructive remarks are not included. Aside from Microsoft Word, several commercially accessible writing checkers have lately begun providing users with more valuable comments on these problems. Online Writing Checkers are online tools that check writing for grammar, spelling, and punctuation. Some can even go beyond basic correction by checking contextual errors, word selection, and plagiarism (Yang, 2018; Perdana & Farida, 2019; Tambunan, Andayani, Sari, & Lubis, 2020; Ebadi, Gholami, & Vakili, 2022). These tools enable students to correct mistakes with high accuracy and speed. A vast selection of online writing checkers on the World Wide Web provides unique services. Each one has its essential capabilities, which may be used to quickly and efficiently modify any text. These many online writing checkers are accessible commercially. Several tools still need a subscription fee to allow full access to all of their services, while others offer free and paid choices with varying service levels. A significant number of articles provide summaries of several online writing checkers that they have tested. It is hoped that the reviews give enough information for instructors, students, and researchers who want to utilise the writing checkers depending on their needs, which is why the checks were written. As a result, many studies on Automated Writing checkers (AWC)

Programs have predominantly been conducted. Many of these studies focused on the outcomes of the students writing and the comparison between AWC programs (Fahmi & Cahyono, 2021). Perdana and Farida (2019) mentioned that online writing editors are becoming increasingly popular, especially for EFL writing. Academicians and students are beginning to apply these tools to better their writing since the tools' major characteristics fulfil their requirements. They added that researchers are also interested in examining the usage and efficiency of these tools for EFL writing. There have been several investigations, and their foci differ. Yang (2018) investigated the efficiency of feedback from the grammar checker in improving grammar accuracy in L2 students' writing and students' perceptions towards the grammar checker as a language-learning tool. The findings of Yang's study implied that grammar checkers could serve as a useful pedagogical tool to help grammar use for low-proficient L2 learners' writing. Recently, writing checkers have provided users with more informative feedback, such as SpellcheckPlus, Gingersoftware, Grammarly, Quillpbot, wordtune, ProWritingAid, SCRIBENS, Linguix and so forth. Today, Grammarly, founded and began operations in 2009, dominates the market for software applications whose primary purpose is to provide aid with writing (Dale and Viethen, 2021). Being popular among EFL learners, Grammarly has been widely researched. Cavaleri and Dianati (2016) and O'Neill and Russell (2019) investigated university students' attitudes about using Grammarly. Both studies revealed comparable results. Cavaleri and Dianati (2016) discovered that students perceived Grammarly as a valuable and worthwhile tool. In addition, they thought that this tool enhanced their writing and comprehension of grammatical standards. The research conducted by O'Neill and Russell (2019) revealed that students who received feedback from Grammarly were much more satisfied with the tool than those who did not utilise it. In other words, the research indicated that students have favourable impressions of online grammar checkers. A study conducted by Darayani, Karyuatry, and Rizqan (2018) was to determine whether or not using Grammarly might increase the quality of writing students produced when describing their experiences. Their research led them to conclude that students would benefit from using Grammarly since it would reduce the number of errors they made and increase the quality of their writing. Fahmi and Cahyono (2021) investigated the students' perspectives on the use of Grammarly and teachers on their writing. They were also interested in determining whether the students' levels of English ability influenced their perspectives. Their research revealed that the students had favourable perceptions of using Grammarly feedback. In addition, the students' levels of English ability did not affect their view of using Grammarly or the comments they received from their teachers. Positive responses were received from students of high and low English proficiency levels after utilising Grammarly and receiving comments from their teachers. The various writing checkers available online nowadays has led to an overall improvement in the quality of written work. Every day, more researchers and academics become aware of the benefits of using these platforms (Fahmi & Cahyono, 2021). This study aims to learn about the users' opinions, levels of use, degrees of motivation and the difficulties and problems of using OAWCs.

### 3. Method

The methodology of this study is a combination of quantitative and qualitative analysis.

#### 3.1 Participants

60 English language majors who had each taken four writing courses made up the study's participants. They were chosen among third-year students at Qassim University, Unizah, the College of Sciences and Arts, and the English Department. The primary requirement for participation in this study was a prior experience with online automated writing websites. The study omitted any student who claimed they had never attempted such a learning method.

#### 3.2 Instrument

The students' perceptions of online-automated writing assisting were examined using a three-part structured questionnaire.

#### Validity of the Questionnaire:

It was required to validate the questionnaire once it had been formed into good and comprehensive statements addressing the study's components. Some university English language teachers examined the constructed questionnaire to ensure its validity. The experts left out some ideas and reworded others to prevent ambiguity or denial. In the end, they verified that every question on the questionnaire was precise, definite, and understandable.

#### Reliability of the Questionnaire:

To check the questionnaire's reliability, the researchers randomly selected a small group out of the sample, 25 students who were excluded from the study later. They were asked to read each statement of the prepared questionnaire and respond by checking in the right column of their choice from the old version.

After collecting the questionnaire's answers, the data were fed and analysed in the SPSS program. SPSS version (25) for windows was used to compute descriptive statistics (frequencies, percentages, means, and standard deviation) and perform reliability. The reliability of the questionnaire was found to be 0.79.

**Table 1. Cronbach's Alpha**

| N of Items | Cronbach's Alpha |
|------------|------------------|
| 19         | 0.79             |

#### 3.3 Procedure

The following procedures were followed to investigate the EFL Learner's Perceptions about using online automated writing checkers.

1. Reviewing relevant literature.
2. Designing a questionnaire.

3. Checking the validity and reliability of the questionnaire.
4. Administering the previous tool to sample third-year university students.
5. Treat the data statistically by using SPSS software.
6. Interpreting the findings of the study.
7. Introducing the recommendations of the study.

#### 4. Results and Discussion

To answer the study question, 60 learners, third-year English department students, responded to a three-part- questionnaire. The first part of the questionnaire, which included nine statements, investigates usefulness (**Do learners think that OAWC helps improve their writing skills?**) The second part, which included seven statements, explores motivation (**Do learners think that OAWC motivates them to improve their writing skills?**). The third part, which included three statements and two open questions, investigates problems and difficulties (**What problems and challenges do learners encounter when they use OAWC to improve their writing skills?**)

For statistical purposes, the researchers assigned numerical values to the responses in the following manner:

Strongly agree = 5

Agree = 4

Neutral = 3

Disagree = 2

Strongly disagree = 1

To illustrate the respondents' reactions to each statement, the sum and mean scores were computed. Then, statements of the same arithmetic groups were discussed together. The mean score for item number 1 in the questionnaire, for example, becomes

$$\begin{aligned}
 \text{Mean} &= (13 \times 5) + (34 \times 4) + (11 \times 3) + (2 \times 2) + (0 \times 1) \\
 &= 65 + 136 + 33 + 4 + 0 \\
 &= 238 \\
 &= 238/60 \\
 &= 3.9
 \end{aligned}$$

The mean score, 3.9, indicates the average number of students' responses to the given statements. The mean scores of the items are above 3.0, the neutral point on the scale. It shows that the learners positively perceive **online automated writing checkers** to help them get used to authentic English materials. The same method was applied to the rest of the statements.

#### **Students' response to whether online automated writing checkers are useful in improving their English Language?**

The statements, which have been used to answer this question, were as follows:

1. **OAWC** helps me to get used to authentic English materials.

2. **OAWC** helps me to expand my writing skills in comfortable ways because I can access it anytime and anywhere.
3. **OAWC** helps me to improve my achievement in my writing courses.
4. **OAWC** is useful for learning a variety of English expressions and vocabulary.
5. **OAWC** is useful because it provides explanations for errors or mistakes
6. **OAWC** is useful because it provides different suggestions that go along with the type of writing
7. **OAWC** helps to understand complex concepts better.
8. The **OAWC** feedback is more beneficial for me than the teacher's feedback.
9. Using **OAWC** is a sign of unproficiency.

**Table 2. Students' Responses to the First Question (a)**

| The statement | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total | Mean | Std. D |
|---------------|----------------|-------|---------|----------|-------------------|-------|------|--------|
| 1             | 13             | 34    | 11      | 2        | 0                 | 60    | 3.9  | 0.73   |
| 2             | 38             | 17    | 2       | 2        | 1                 |       | 4.4  | 0.85   |
| 3             | 22             | 27    | 8       | 2        | 1                 |       | 4.1  | 0.88   |
| 4             | 22             | 25    | 10      | 3        | 0                 |       | 4.1  | 0.85   |
| 5             | 36             | 16    | 7       | 1        | 0                 |       | 4.4  | 0.76   |
| 6             | 25             | 28    | 5       | 2        | 0                 |       | 4.2  | 0.75   |
| 7             | 10             | 24    | 19      | 7        | 0                 |       | 3.6  | 0.90   |
| 8             | 9              | 5     | 19      | 23       | 4                 |       | 2.8  | 1.1    |
| 9             | 3              | 7     | 7       | 31       | 12                |       | 2.3  | 1      |

As seen from Table 2, the mean scores of the students on items 1 to 7 are above 3.0, which is the neutral point in the scale. On the other hand, the mean scores for items 8 and 9 are less than 3.0. This shows that many EFL students think that OAWC helps their English Language, but learners don't feel that OAWC feedback is more beneficial than the teachers' feedback because they prefer to get teacher feedback on their writing. Furthermore, many don't think using OAWC is a sign of unproficiency. They mention that they use it only when it is impossible to get a teacher's feedback for one reason or another.

#### **Students' response to whether online automated writing checkers motivate them to improve their English language.**

The statements, which have been used to answer this question, were as follows:

10. It is enjoyable to use **OAWC** for my writing skills.
11. **OAWC** motivates me to practice English frequently with different types of writing.

12. **OAWC** motivates me to self-study to improve my writing skills.
13. Improving writing skills through **OAWC** motivates me to meet my needs
14. **OAWC** encourages me to write without being afraid to commit mistakes.
15. **OAWC** creates an attractive environment to practice writing skills away from class
16. The **OAWC** motivates me to improve my writing skills more than my teacher does.

**Table 3. Students' Responses to the First Question (b)**

| The statement | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total | Mean | Std. D |
|---------------|----------------|-------|---------|----------|-------------------|-------|------|--------|
| 10            | 12             | 36    | 10      | 2        | 0                 | 60    | 3.9  | 0.71   |
| 11            | 18             | 28    | 10      | 4        | 0                 |       | 4    | 0.86   |
| 12            | 23             | 31    | 3       | 3        | 0                 |       | 4.2  | 0.76   |
| 13            | 10             | 33    | 14      | 3        | 0                 |       | 3.8  | 0.76   |
| 14            | 25             | 24    | 9       | 2        | 0                 |       | 4.2  | 0.81   |
| 15            | 23             | 21    | 14      | 1        | 1                 |       | 4    | 0.91   |
| 16            | 4              | 15    | 21      | 19       | 1                 |       | 3    | 0.95   |

Table 3 shows that the mean scores of the items are above 3.0, which means that students think that the online automated writing checker motivates them to improve their English language.

As can be seen from the results, generally, there is evidence of students' positive perceptions towards using OAWC in improving their language learning.

#### **Students' responses to what problems and difficulties they encounter when using online automated writing checkers to improve their English Language?**

The statements, which have been used to answer this question, were as follows:

17. It isn't easy to decide which online automated writing checker suits me.
18. It isn't easy to print/download the materials I am interested in.
19. The language used is very difficult

**Table 4. Students' Responses to the Second Question**

| The statement | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total | Mean | Std. D |
|---------------|----------------|-------|---------|----------|-------------------|-------|------|--------|
| 17            | 6              | 13    | 14      | 25       | 2                 | 60    | 2.9  | 1      |
| 18            | 4              | 9     | 14      | 31       | 2                 |       | 2.7  | 0.99   |
| 19            | 0              | 4     | 16      | 30       | 10                |       | 2.2  | 0.81   |



The data presented in Table 4 illustrate that the mean scores of the statements are less than 3.0, which is the neutral point in the scale. This clearly shows that the students do not think these are problems they encounter when using OAWCs to improve their English Language.

When participants mentioned other difficulties in using OAWCs, many said Internet access is an issue as long as they cannot use them offline. The participants listed other problems. The most frequent ones are:

- 'To get full features of OAWC, many are paid, and the subscription fees are pretty high'.
- 'Sometimes, the OAWC misunderstand the concept or the subject and suggests the wrong words'.
- 'The main con of the writing Checker program is that it only checks sentence structure. It will not help to produce better ideas and not group ideas into logical sentences.'
- 'Sometimes it does not show an explanation, or clear feedback, for mistakes'.
- 'The overuse of such tools may affect English knowledge, like vocabulary and grammar'.

When were students asked What is/are the most used automated writing checker/s use? 75% of the participants answered Grammarly because their teacher recommended it. The other participants' answers varied between whatever was available, easy to use or free.

## 5. Conclusions of the Study

The results of this study have shown that students perceive using OAWCs to improve their language learning positively. Students think these tools are helpful. These support Cavaleri and Dianati's (2016) finding that learners found OAWC helpful in improving their writing skills. In addition, students are internally motivated to use OAWCs to facilitate their learning. Students think that the language used in OAWCs is simple, and they believe it is easy to download the materials they need from these websites. When asked to mention other difficulties they encounter when using OAWCs, participants say the internet access problems and the high fee. Summing up the results, many learners think that online automated writing checkers help improve writing, even though some unveil the failure of these tools in detecting some errors. The learners agree that online grammar checkers can help correct grammar mistakes, but they may still need to be optimum in improving the content and organisation of writing. Students perceive online grammar checkers as helpful tools to improve their writing (O'Neill & Russell, 2019). The results of this research agree with Yang's (2018) findings. This research paper investigated students' perceptions of 60 undergraduate students about using OAWCs. The author has analysed the qualitative data in the study to understand how students perceive the use of OAWCs for improving their writing skills. The analysis of students' perceptions towards OAWCs indicated that it is pretty accepted among students. Further investigation of the relationship between perceived learning improvement (perception) and motivation (attitude) is required regarding learning performance. The author recommends that the use of OAWCs can be adopted to enhance students' interaction and learning experiences inside and outside the classroom.

## 6. Recommendations

Some recommendations are made based on the above findings.

1. Students at the university level should be encouraged to be exposed to different OAWCs under the supervision of their teachers.
2. There is a need for further research (action research) to investigate using OAWCs to improve writing skills.

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