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Exploring the Role of Grammarly in Reducing EFL Students' Grammatical Errors in Academic Writing The Case Study of Master One Students at Mohamed Khider University of Biskra, Algeria

Dissertation submitted to the Department of Foreign Languages in partial fulfilment of the requirements for the Degree of **Master** in **Sciences of the Language**.

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Declaration

I, **Chiraz DEROUES**, hereby declare that this dissertation entitled **"Exploring the Role of Grammarly in Reducing EFL Students' Grammatical Errors in Academic Writing"** is my original work. This dissertation has not been previously submitted for the award of any degree or diploma at this or any other institution. All sources and references used have been duly acknowledged.

This study was conducted and completed during the academic year 2024/2025 at Mohamed Khider University of Biskra, Algeria.

Certified,

Ms. Chiraz DEROUES

Dedication

In the name of Allah, the Most Gracious, the Most Merciful.

All praise is due to Allah, whose Blessings, Guidance, and Mercy have enabled me to reach this milestone. I am deeply grateful for His countless favors and for surrounding me with loving and supportive people.

This work is dedicated to the most precious people in my life:

To my dear father, whose strength, encouragement, and sacrifices have always inspired me to strive for excellence.

To my beloved mother, whose endless love, prayers, and unwavering support have been my greatest comfort and motivation.

To my cherished grandmother, whose wisdom and gentle presence have been a source of light and inspiration throughout my journey.

To my little siblings—my brother Amir, and my sisters Ritedj and Jana—your laughter, innocence, and dreams fill my heart with hope and happiness. Amir, your curiosity and energy inspire me every day. Ritedj and Jana, your smiles remind me of the beauty in life's simplest moments. May this achievement encourage you to pursue your dreams with faith and determination.

To all my teachers, whose dedication and guidance have shaped my academic path and ignited my passion for learning.

With all my love and gratitude,

I dedicate this achievement to you all.

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Abstract

Nowadays, Artificial Intelligence (AI) is becoming increasingly common in education. Applications such as Grammarly offer automatic help with grammar, spelling, and vocabulary, providing a resource that students and teachers can use to support their writing. This study looks specifically at exploring the role that Grammarly plays in reducing EFL students' grammatical errors in academic writing, with Master One EFL students at the Department of English Language and Literature at Biskra university, Algeria. This study's primary purpose is to assess the effectiveness of Grammarly in assisting EFL students in detecting and correcting grammatical mistakes in their academic writing. Secondary aims are to assess which aspects of Grammarly are most effective and to understand EFL students' and teachers' opinions about its use. The study's target population includes all Master One EFL students and their teachers at the same department. Data were collected using a semi-structured questionnaire with thirty-three (33) students and a structured interview with four (4) teachers. Results indicated that Grammarly aided students in recognizing and correcting grammatical mistakes and improved writing accuracy and confidence in self-editing. The teacher also reported that Grammarly encouraged more learner independence and self-editing. However, both students and teachers reported some limitations, such as students' overreliance on automated feedback and insufficient accuracy with more context-specific or advanced errors. In light of these findings, the researcher recommended teachers to encourage the use of Grammarly when instructing writing. In addition, university stakeholders are encouraged to provide specific instruction to students and teachers that emphasizes the benefits of using digitized writing supports while not abandoning writing conventions.

Keywords: Academic writing, Grammarly, grammatical errors.

List of Acronyms

AI: Artificial Intelligence

AWE: Automated Writing Evaluation

CLIL: Content and Language Integrated Learning

EFL: English as a Foreign Language

ESL: English as a Second Language

L1: First Language/Native Language

L2: Second Language

NLP: Natural Language Processing

SVA: Subject-Verb Agreement

TALL: Technology-Assisted Language Learning

List of Appendices

List of Figures

Table of Contents

General Introduction

The recent use of artificial intelligence (AI) in educational situations has transformed the realms of language learning, providing new solutions for students, teachers, and educators. With the increasing demand for digital literacy to be valued, AI Apps have started to offer wonderful advantages to academic writing, even for English as a Foreign Language (EFL) students. The increase in technology use is apparent due to the trend of technology-based language learning, which allows users of any background to receive immediate feedback and assistance. Grammarly is such an application that provides solutions close to real-time corrections and suggestions on grammar, correct spelling, and vocabulary usage, which makes it readily accessible to anyone in an academic, educational context or setting.

Numerous challenges persist for advanced EFL students in relation to achieving grammatical accuracy in academic writing despite the widespread use of Grammarly and similar applications. Grammatical errors can compromise the clarity and coherence of academic papers and impact students' self-efficacy and success in their studies. AI-aided writing applications can help alleviate these concerns by providing automatic and immediate feedback about features, such as grammar and spelling. However, one still wonders about their potential efficacy in creating sustainable benefits to students, concluded written language productions, especially in the context of EFL writing outcomes in Algerian higher education, where evidence based on empirical research is limited. Thus, it is appropriate to evaluate the effect of Grammarly on the ability of Master One English students, in the English department at Mohamed Khider University of Biskra, to reduce grammatical mistakes in academic writing, informing future practices with technology in language education.

1. **Statement of the Problem**

Although digital technologies and artificial intelligence-driven tools are increasingly commonplace in higher education, there are still major issues impacting academic writing for EFL students. At Mohamed Khider University of Biskra, we expect master's students of English to produce research and academic texts that reflect a high level of grammatical accuracy, coherence, and academic integrity. However, excessive grammatical errors continue to deteriorate the quality of the finished research papers and academic texts that students submit, impacting their grades and formal academic communication.

Despite the promotion of tools like Grammarly and the growing use of such tools by both students and educators alike, there is a lack of empirical research on how they impact students' overall writing ability, particularly within the Algerian context. Many of these students may be using the grammar, punctuation, and vocabulary automated feedback generated by Grammarly, and it will remain unclear if repeated use of the software affords students changes in their writing that are meaningful and/or long-lasting. Furthermore, there is little knowledge regarding what features of Grammarly have the most impact on students, how students are engaging with it, and whether the feedback is deeply absorbed and subsequently applied in future writing contexts.

The significance of the problem heightened due to the fundamental role academic writing plays in higher education and the construction of professional identity. For EFL learners, mastery of grammatical correctness is not only a requirement for academic success but also a critical skill for a future career, whether teaching, research, or international communication. Potential negative consequences of persistent grammatical errors may result in misunderstanding, diminished credibility, and missed academic/professional opportunities. When opportunity is assessed globally, which

English is continually doing as the global means of science and scholarship, the generation of clear and correct output is going to be necessary.

The issue is made even more unfocused because technology is changing rapidly and bringing with it more reliance on AI-based writing tools. Writing tools, such as Grammarly and other companies that will be mentioned in a later section, insinuate that they provide students with immediate and personalized feedback, but this raises the question of whether students are going to wholly depend on the automated feedback without considering the rationale behind grammar rules. It does beg the question of how effective this tool is in a pedagogical sense for teaching students in academic writing, as well as for instructors, and the responsibility of reviewing the function of such writing tools.

2. Research Aims

The ultimate goal of this research is to study the effects of Grammarly on reducing grammatical errors in master's students' academic writing in the area of English. Specifically, the research aims to:

- Explore the role of Grammarly on reducing grammatical errors in the academic writing of master's students of English.

- Explore how the use of Grammarly affects the overall quality and clarity of students' written texts.

- Identify which features of Grammarly are most frequently utilized and considered most beneficial by students during the writing and revision process.

- Investigate students' perceptions and experiences regarding the effectiveness and limitations of Grammarly as a tool for supporting academic writing.

3. Research Questions

This research seeks to answer the following research questions:

1. How does the use of Grammarly influence the reduction of grammatical errors in the Academic Writing of Master One Students of English at Biskra University?

2. Which features of Grammarly are most frequently utilized and considered most beneficial by students during the writing and revision process?

3. How do students perceive the effectiveness and limitations of Grammarly as a tool for supporting their academic writing?

4. What challenges or difficulties do students encounter when using Grammarly to improve their academic writing?

4. Research Methodology

4.1 Research Approach

A mixed-methods research framework was implemented in this study to explore how students at the English postgraduate level use Grammarly to correct their academic writing errors. The research combines qualitative and quantitative methods to gather information about how students experience using Grammarly for writing support while also determining the statistical patterns in their responses. The research approach matches the defined objectives and research questions by revealing the effects of Grammarly and uncovering the methods students use the tool and their writing difficulties, and the specific influences on their writing process. The qualitative phase focuses on gathering comprehensive data from open-ended responses, which the quantitative part uses to analyze statistical information from closed-ended questionnaire items. The integrated method delivers the best solution to investigate technological writing support in academic EFL settings because it provides both detailed and wide-ranging research results.

4.2 Population and Sampling

The population of this study is represented by all Master One English learners and their instructors in the Department of Foreign Languages at Mohamed Khider University of Biskra during the academic year 2024/2025. The population was selected because Master One students are on the cusp of higher educational practices, where the focus on academic writing quality and grammatical correctness is heightened. At this level, students are required to develop and submit research papers, theses, and other academic publications using English, making Master One students a suitable population to investigate the use of AI-based writing tools, such as Grammarly.

From that population, a purposive sample was drawn to ensure that participants who had, at a minimum, promoted experience with academic writing and had likely worked with digital writing aids. The sample included 33 Master One English students and 4 teachers. The students were chosen based on their enrolment in academic writing courses and their coursework, having been exposed to Grammarly. The teachers were selected for their roles in want of supervising/evaluating students' academic writing and their knowledge of the learning challenges associated with the students' negotiation of achieving grammatical accuracy. The purposive sampling ensured data were captured that were pertinent and informative of the use and effect of Grammarly in the situated context of advanced EFL academic writing.

4.3 Data Collection Tools

The study gathered information through two distinct assessment tools: a semi-structured questionnaire administered to Master one EFL students and a structured online interview conducted with their teachers. The Master One English students received the printed questionnaire, which they completed during their regular academic sessions. Students were able to provide detailed information about their Grammarly experiences through a questionnaire, which contained both open and closed questions about their usage patterns and academic writing results. The questionnaire combined open-ended questions with closed-ended questions to extract both qualitative feedback about Grammarly usage and quantitative data about student usage behavior. The physical distribution of questionnaires at official sessions helped maintain a high completion rate and provided students with the necessary academic setting to finish their responses.

EFL teachers participated in a structured interview to balance the student viewpoint. The teachers received standard question sets through online platforms, which they answered through written responses at their preferred times. The flexible interview

method allowed participants to deliver meaningful responses based on their schedules. The interview questions explored how teachers observe student writing development while evaluating the educational effectiveness and drawbacks of Grammarly and documenting their digital tool-based academic writing instruction practices. The research team implemented an anonymous data collection method to safeguard participant privacy and maintain research integrity. The researcher selected a combination of two data collection methods to produce detailed qualitative descriptions while achieving a complete understanding of Grammarly's EFL writing impact at Mohamed Khider University of Biskra.

4.4 Data Analysis Procedures

The study employed a mixed-methods approach in which both qualitative and quantitative data were gathered in order to understand the role of Grammarly in reducing grammatical errors in academic writing for Master One English students at Mohamed Khider University of Biskra.

Creswell (2014) defines qualitative research as "an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem". This research used qualitative data from interviews with teachers to investigate their beliefs in the effectiveness of Grammarly for supporting students' academic writing.

The interview data were analyzed using thematic analysis. Maguire and Delahunt (2017, p. 3352) state that thematic analysis is "the analytical process of identifying patterns or themes within qualitative data." The interview transcripts were read thoroughly to become familiar with the content. The key points and common ideas were coded and clustered into themes that represented teachers' experiences and opinions of Grammarly's impact, value, and limitations. Each theme was identified and defined to ensure a meaningful and coherent interpretation of the data.

Quantitative data were obtained using a semi-structured questionnaire for Master One students. The data will be organized descriptively. According to Kaushik and Mathur (2014, p. 1189), descriptive analysis is "the tools that are used to collect and provide a summary of vast quantities of data and information in an organized and manageable way." The closed-ended answers were coded, imported into Google Sheets and Microsoft Word to organize the frequencies and percentages to summarize the students' demographic information, Grammarly patterns of use, and perceptions of its effectiveness. The results are presented in figures and tables for clarity.

The analysis of the qualitative interview data through thematic analysis and the quantitative questionnaire data through descriptive analysis has allowed this study to provide a full understanding of Grammarly's implications for supporting EFL students' academic writing.

5. Significance of the Study

The present study, therefore, fills a critical void in the literature about artificial intelligence-supported writing tools, specifically Grammarly and its effect on grammatical accuracy in the academic writing of EFL master's students. As language learners increasingly engage with digital tools to support their writing, empirical evidence continues to be limited for understanding the effectiveness of these tools in authentic academic settings, particularly for advanced learners who have an expectation to produce precise written English. This research specifically considers Grammarly's role in reducing grammatical errors and contributes evidence and understanding about whether digital tools such as Grammarly represent added opportunities to construct writing capabilities in practice, or whether their impact is exaggerated.

The study makes an academic contribution to the expanding literature on the

incorporation of AI in language education. It presents a perspective on how automated writing evaluation software may be used to guide grammar instruction and self-correction with EFL learners. The study's outcomes are likely to help educators, curriculum developers, and researchers better understand the practicality and the advantages and limitations of integrating Grammarly into academic writing instruction; thus, helping in determining better pedagogical options and technology-related decisions in similar educational contexts.

From a practical standpoint, this study has implications for students and teachers seeking to improve writing quality and academic performance. The study identified the most helpful features of Grammarly and explored students' perceptions and experiences of Grammarly, from which meaningful suggestions could be made to help students make the best use of the tool in their writing practices. The study can also identify potential barriers or pitfalls to using such tools, which can allow a better-informed decision to be made about incorporating that technology into their writing practices.

At a social level, English is increasingly the international language for academia, science, and communication, and being able to produce clear and accurate texts has never been more important for educational and professional advancement. Thus, by helping EFL students overcome ongoing grammar challenges, this study works toward a more equitable educational experience and increased access to opportunities worldwide.

Moreover, the results of this study may provide support for institutional policies on the use of digital tools in higher education, as well as motivate further research into the future consequences of AI-assisted writing. Also, the research developed can create a starting point for future theoretical investigations into technologies, learning new

languages, and writing development.

6. Structure of the Dissertation

The present dissertation is organized into three chapters, each of which addresses a specific aspect of the research topic.

Chapter one introduces This chapter introduces Grammarly as an AI tool with a purpose to assist with grammar, spelling, punctuation, and vocabulary in academic text. It describes the functionality of Grammarly's free and premium versions, such as benefits of error checking, vocabulary enhancement, and plagiarism detection. The chapter also refers to Grammarly's drawbacks of overcorrection and poorer contextual understanding and emphasizes the importance of grammar in academic text for clear and effective communication.

Chapter two describes what academic writing is and outlines its necessary features, such as formality, coherence, and authenticity. It describes common types of errors in academic writing, including grammatical errors, word error, spelling, and punctuation. The chapter also touches on the role played by assessment and feedback in academic writing, comparing traditional methods with AI tools like Grammarly, and how these tools can help students improve their writing skills.

Chapter three describes research design, including a mixed-methods study through a student questionnaire and teachers' interview. It explores students' views regarding the efficacy of Grammarly, its impact on their writing skills, and the challenges faced, including over-reliance and inappropriateness of suggestions. The chapter ends with a discussion of findings, pedagogical insights, and recommendations to integrate Grammarly into academic writing instruction without compromising traditional pedagogy.

Chapter One

Grammarly Software

Introduction

Technology's rapid development has revolutionized every aspect of human life, and education is no exception. In recent years, educational technology has been increasingly prevalent in the context of English as a foreign language teaching and learning. EFL learners of this digital era are known as "digital natives" or members of the "Net Generation" since they were born in the digital age and have been exposed to digital technology early. Furthermore, Artificial Intelligence nowadays is integrated in every aspect of daily life, including language processing and learning. Likewise, given the critical role of grammar in learning English as a foreign language, numerous digital artificial intelligence-powered tools that provide corrective grammatical feedback have gained the attention of teachers and learners of the English language. Grammarly is an application and website powered by artificial intelligence used by both native and non-native English language writers in the context of tertiary education to verify and correct grammatical, spelling, punctuation, and word choice errors in their texts. Grammarly also offers multiple other services, such as plagiarism checking. Hence, this chapter discusses artificial intelligence and how Artificial Intelligence-powered applications, such as Grammarly, process language. In addition, Grammarly software is defined, its types and the services and features each type offers are explained. Moreover, both the advantages and disadvantages of Grammarly are presented and discussed. Eventually, the role of grammar in academic writing is explained and detailed at the end of the chapter.

1. Artificial Intelligence and Language Processing

Artificial Intelligence is defined by Abbass (2021) as a social and cognitive phenomenon enabling a machine to socially integrate with a society and perform tasks that require cognitive and communicative processes. Artificial intelligence has permeated and become integrated into every aspect of human life, including language learning and language processing. This has revolutionized language-related tasks, especially in the context of

language learning (Raheem et al., 2023). Moreover, Raheem et al. (2023 referred to language processing as enabling Artificial Intelligence systems "to understand, interpret, generate, and interact with human language" (p. 601). Furthermore, Raheem et al. (2023) explained that an AI system's ability to analyze, interpret, and comprehend human spoken and written language is attributed to numerous techniques and algorithms.

In recent times, AI has made significant strides in the domain of language processing, resulting in the development of sophisticated AI-powered language models and tools. These AI-powered systems are capable of performing tasks like language translation, sentiment analysis, text summarization, and speech recognition with astounding accuracy and proficiency (Raheem et al., 2023). In addition, Grammarly is an AI-powered language processing application. Grammarly has become an indispensable tool used by students, educators, and writers in the English language since this application offers recommendations and corrections of style and grammar to enhance a text's quality (Alharbi, 2023).

The Grammarly application has gained great popularity due to its automated grammar and style checking; more elaborately, its ability to detect and correct grammar and punctuation errors and writing style inconsistencies (Chen et al., 2022). According to Andrea (2023), a plethora of studies have concluded that using AI-based writing tools significantly reduces the number of errors and refines the writing quality in written academic discourse. Additionally, as per O'Flaherty and Costabile (2020), AI is employed to detect plagiarism, which is a crucial aspect of academic writing integrity. Plagiarism detection software, which is powered by AI algorithms, assists both educators and institutions and students in establishing originality and authenticity.

2. Grammarly Software

Grammarly Software is a type of Corporation that was founded in 2009 by Alex Shevchenko and Max Lytvyn, with its main manufacturing unit in San Francisco, California,

the United States of America. Its services include grammar checking, spelling checking, proofreading, and plagiarism detection. (Qassemzadeh and Soleimani, 2016). In addition, Huang et al. (2020) mentioned that Grammarly is an Automated Writing Evaluation (AWE) software, and it is one of the most accurate grammar checkers among numerous similar software available online. Grammarly detects and categorizes errors into six categories: namely, context spelling, punctuation, grammar, sentence structure, style, and vocabulary improvement. Subsequently, Grammarly offers comprehensive and suitable corrections and suggestions with great speed and accuracy, added Huang et al. (2020).

Furthermore, Perdana et al. (2021) explained that Grammarly is an application designed as a writing aid that assists writers in the English language in identifying and correcting various types of language or grammar errors. Grammarly's functions, according to Perdana et al. (2021), are verifying and identifying errors in written English, offering writing assistance, correcting grammatical errors and word misspellings, and adopting to the writing style of the writer (e.g. academic or business English writers could select the suitable style and purpose of writing). Grammarly, likewise, detects plagiarism among academics by verifying and comparing other written data. Similarly, Ghufron and Rosyida (2018) stated that Grammarly is an automatic internet software and an online proofreading website, which scans documents in search of grammar errors, corrects spelling mistakes and punctuation errors, and detects plagiarism.

Moreover, the use of Grammarly Software is not restricted to non-native English language speakers; native speakers of English also use Grammarly. As per Amelia & Abidin (2018), native English speakers and writers use a wide range of online academic writing applications, including Grammarly.

3. Types of Grammarly

Grammarly Software comes in two versions, namely, the free limited version and the pro unlimited version.

3.1 Grammarly's Free Edition

Grammarly's free service option offers access to a limited number of services. Principally, the following three aspects: grammar, spelling, and punctuation. (Vu, 2024). In addition, Perdana et al. (2021) asserted that the free edition on the website only displays mistake areas; however, it does not provide automatic corrections. According to Astuti et al. (2023), Grammarly's free version has fewer features than the premium one.

3.2 Grammarly's Pro Edition

According to Perdana et al. (2021), the premium version works quickly and automatically in identifying errors and providing corrections with easy operations on the highlighted parts. Additionally, Vu (2024) stated that Grammarly's Premium edition offers access to all features, including the ones provided by the free grammar checker edition, in addition to extra advanced features. In this regard, Grammarly (2025) details that its pro edition's services include rephrasing sentences, adjusting the tone of writing, writing fluently in English, unlimited customized suggestions, detecting plagiarism and texts generated by Artificial Intelligence (AI), and text generating with 2.000 AI prompts, in addition to the services available in the free edition. Furthermore, according to the Grammarly website (2025), to access its pro features, Grammarly offers monthly, quarterly, and annual subscriptions:

- Monthly subscription plan: $30/member/month (which equals approximately 4.004 Algerian Dinars).

- Quarterly subscription plan: $60/member/three months (which equals approximately 8.008 Algerian Dinars).

- Annual subscription plan: $144/member/year ($12 average cost per member/month), which equals approximately 19.220 Algerian Dinars.

Figure 1.1 below displays the two versions offered by Grammarly and the services each edition provides.
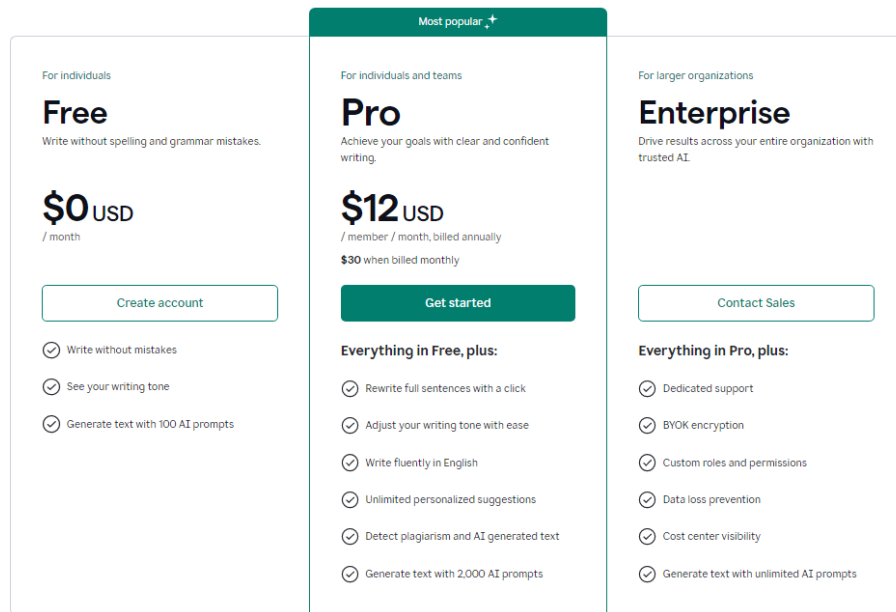
Figure 1: Features of Grammarly's Free and Pro Editions

Note. Screenshot of the features comparison page in the Grammarly app. Captured by the author, 2025.

4. Benefits of Grammarly

With technology being a prominent part of everyday life, it is inevitable to integrate it into the EFL learning experience. Pourhosein Gilakjani and Sabouri (2017) asserted that technology has changed language teaching and learning methods and will continue to do so in the future. They emphasized that through the use of technology, learners would have the ability to control their learning process and have access to unlimited information. Similarly, Al-Maashani and Mudhsh (2023) claimed that technology is reshaping teaching and learning in terms of course content, learning activities, and teacher-learner interactions. According to them, implementing technology has various benefits, including improving students' overall

performance and assisting lower-achieving students by reinforcing their skills, such as grammar. In addition, Nova (2018) claims that Grammarly helps make the writing more readable, comprehensible, accurate, effective, correct, and productive with great accuracy and quick evaluation. Henceforth, Grammarly offers a set of features that assist English writing users in writing correctly, accurately, and coherently. These features include grammar, spelling, and punctuation checking, vocabulary enhancing suggestions, and plagiarism detection.

4.1 Grammar, Spelling, and Punctuation Checking

The most prominent service Grammarly provides for English language writers is checking grammar, spelling, and punctuation errors and correcting them. Daniels and Leslie (2013) mentioned that Grammarly identifies sentence fragments and offers advice on verb form. Grammarly is used to reduce errors made by writers in English in terms of grammar, vocabulary usage, and mechanics (spelling and punctuation). Perdana et al. (2021) mentioned that in terms of language functions in sentence structure, Grammarly's grammar checker is very useful and beneficial for non-native English users who may have the knowledge and information, yet they struggle with expressing their ideas through writing. Moreover, Grammarly can identify punctuation mistakes, such as the missing spaces after periods, in addition to detecting spelling mistakes and providing several alternative suggestions for the misspelled words. Ghufron and Rosyida (2018). The figure below demonstrates Grammarly identifying and suggesting the correction of a subject-verb agreement grammatical mistake; namely, the proper form of the auxiliary "to be" according to the pronoun "it".
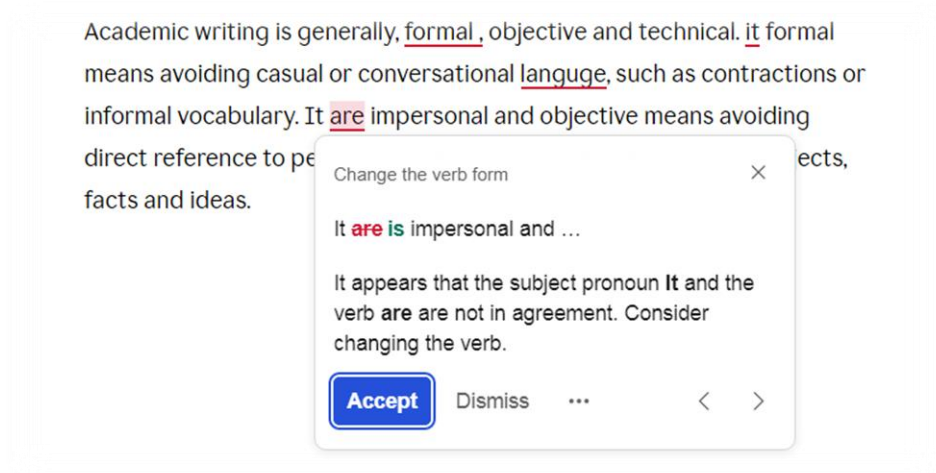
Figure 2: Example of Grammarly Identifying and Correcting a Grammar Mistake

Note. Screenshot of Grammarly identifying and correcting a grammar mistake. Captured by the author, 2025.

Figure 3: Example of Grammarly Identifying and Correcting a Punctuation Mistake

Note. Screenshot of Grammarly identifying and correcting a punctuation mistake. Captured by the author, 2025.

The following figure demonstrates Grammarly detecting a spelling mistake and correcting it.

Figure 4: Example of Grammarly Identifying and Correcting a Spelling Mistake

Note. Screenshot of Grammarly identifying and correcting a spelling mistake. Captured by the author, 2025.

On another note, Nova (2018) concluded from his study that Grammarly offers clear feedback and easy explanations that helped students learn grammar by evaluating their papers using Grammarly. Nova (2018) explained that through the automated evaluation and correction, students could recognize their mistakes, self-revise, and learn not to make similar errors again. Additionally, Zinkevich and Ledeneva (2021) asserted that Grammarly identifies and categorizes mistakes into four groups, namely, correctness, clarity, delivery, and engagement. According to Zinkevich and Ledeneva (2021), Grammarly identifies and corrects numerous grammatical errors, including punctuation mistakes, the misuse of articles, the overuse of subordinate clauses, the overuse of passive voice, dangling modifiers, the use of incorrect linking words, unclear antecedents, and the overuse of prepositional phrases.

4.2 Vocabulary Enhancement

Another noteworthy feature of the Grammarly Software is vocabulary enhancement. As per Ghufron and Rosyida (2018), Grammarly offers a variety of practical and efficient services, including style-specific corrections for various types of writing, context-enhanced synonyms, and an "Adaptive Spell Checker" which corrects spelling and provides word choice suggestions based on the text content. Correspondingly, Grammarly provides the user, automatically, with more and better alternatives for the diction used and grades the writing by giving a score of 99 points, for instance, if the writing is good; however, if the writing is not good, the writing gets a score of 50 points. In addition, Grammarly analyzes the text's content and sentence structure, then corrects and improves the writing. (Perdana et al., 2021). Furthermore, Grammarly detects inconsistency in using British and American English in the same text (Zinkevich & Ledeneva, 2021). Figure 1.5 displays how Grammarly checks for inconsistencies in using one of the varieties of the English language.
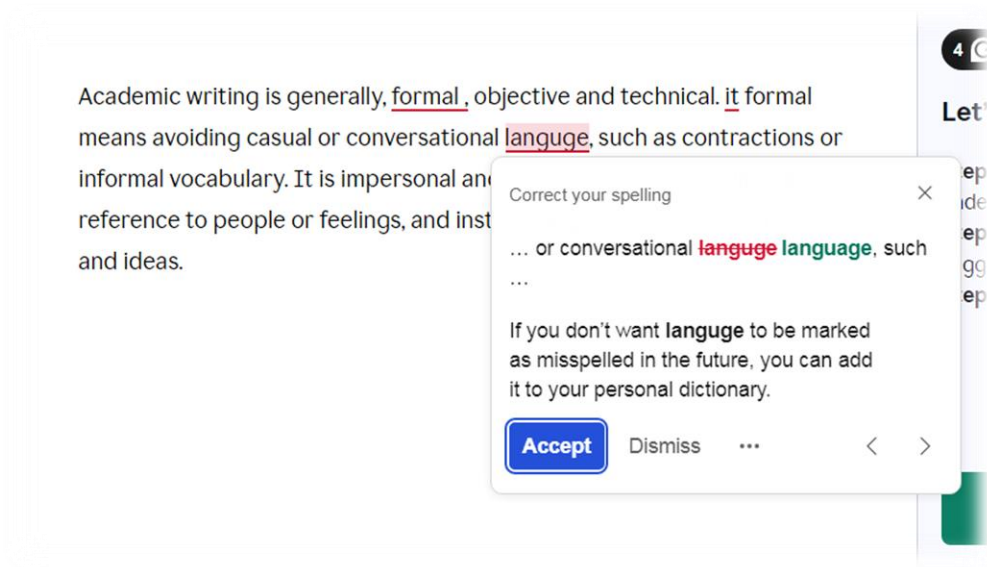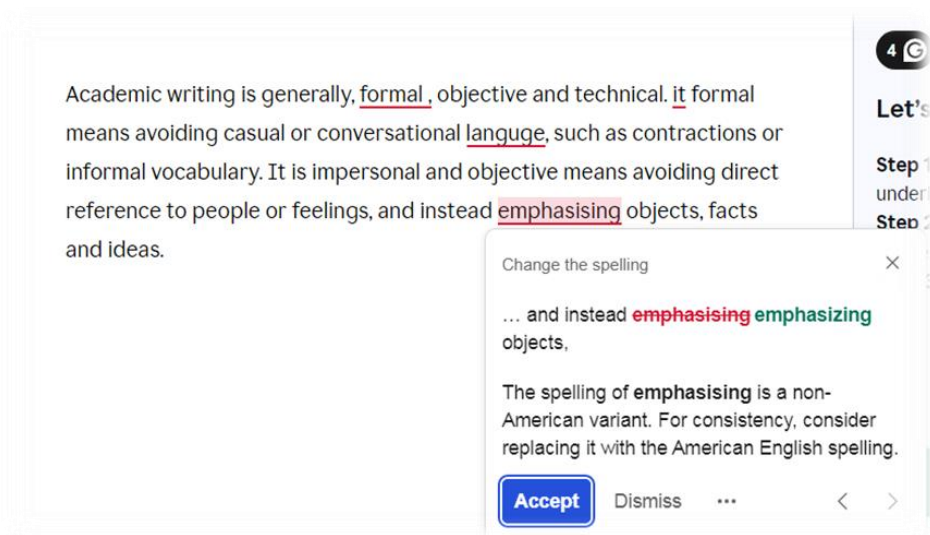

Figure 5: Example of Grammarly Identifying and Correcting a Consistency Mistake

Note. Screenshot of Grammarly identifying and correcting a consistency mistake. Captured by the author, 2025.

4.3 Plagiarism Detection

An additional feature of the Grammarly site and/or application is plagiarism detection, which is crucial in sustaining academic integrity. Anil et al. (2023) argued that Grammarly is excellent at detecting similarities among online resources, and it is the most effective tool in detecting plagiarism in AI-generated articles. Correspondingly, according to Ogwueleka (2025), Grammarly identifies direct text matches via effectively scanning wide databases of academic papers, articles, and web content to signal instances of copied material. Additionally, the Grammarly software verifies and compares the user's writing against a database of eight billion web pages. As per Ghufron and Rosyida (2018). Yet another advantage of the Grammarly website is the easy access and utilization. Nova (2018) confirmed that the procedures of creating an account, submitting writing, to evaluating it are simple. The following figure demonstrates the plagiarism detection feature in Grammarly, despite the fact that it is only available in the Pro Edition.
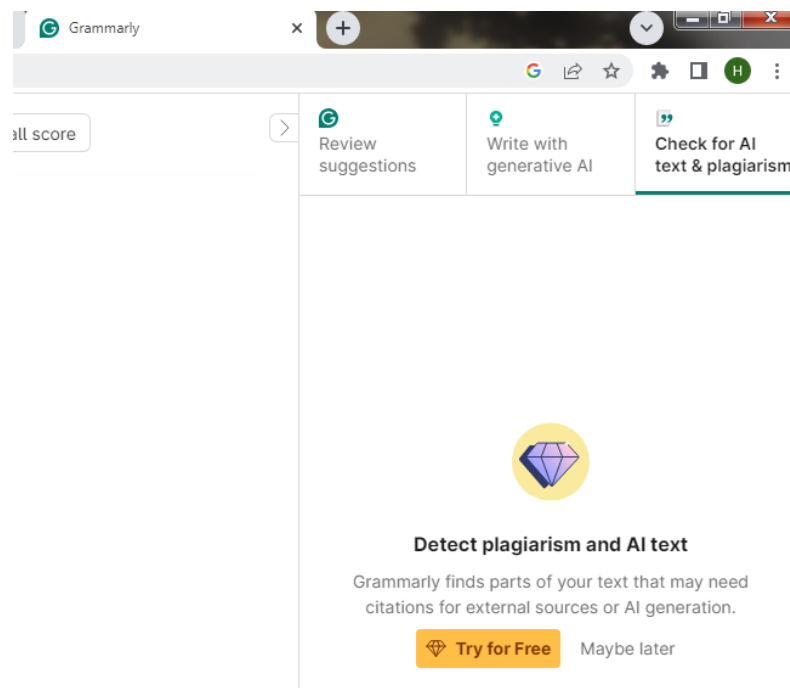
Figure 6: Grammarly's Plagiarism and AI Detection Feature

Note. Screenshot of Grammarly's plagiarism and AI detection feature. Captured by the author, 2025.

5. Drawbacks of Grammarly

Grammarly, a popular writing assistance software among writers in the English language, undoubtedly has both laudable qualities and noteworthy drawbacks. First, as noted by Ghufron and Rosyida (2018), Grammarly fails to accurately evaluate subject relevance and paragraph coherence, which in turn inhibits its ability to provide comprehensive criticism on the quality of written content.

Second, overcorrection is another significant shortcoming of Grammarly. Barrot (2023) explained that this website suggests corrections that, if the user applies, would change the intended original meaning of the text and therefore the text would lose its writer's authentic voice and personal preferences. In addition, the considerable number of comments and corrections provided by Grammarly might have an opposite effect on the user and end result in overwhelming him/her. (Barrot, 2023). Correspondingly, imposing conventional corrections may accidentally diminish the originality of the user's voice. Astuti and Sumarni (2023) emphasize that this imposition triggers "contemplation on the balance between obedience to grammatical standards and the preservation of individuality."

6. Grammar in Academic Writing

Initially, sufficient knowledge of grammar rules and efficient usage of these rules are pivotal for successful communication. Hans and Hans (2017) attested that grammar is the foundation for communication and that every language has its grammar system; thus, individuals who speak the same language can communicate since they subconsciously know the grammar of that language. According to them, the better the grammar of the speaker/writer, the clearer the message, the better comprehension of the message's intention and meaning. Moreover, grammar *is* important, stated Rossiter (2021), whether for students who are native

English language speakers or for students for whom English is a second or a foreign language. Similarly, Hans and Hans (2017) mentioned that since all languages are governed by grammatical patterns, learning and employing apt grammar is essential for learning English as a second language, in addition to learning any new language.

Furthermore, (Celce-Murcia, 1991) agreed that, "the importance of a reasonable degree of grammatical accuracy in academic or professional writing cannot be overstated" (p. 465). On the same note, Rossiter (2021) explained that mastering grammar is fundamental in writing since writing is an indirect form of communication, which requires correct and accurate use of grammar and syntax for the receiver to catch the intended meaning. Likewise, grammatical rules, spelling, lexis, and pronunciation are codes that every speaker, listener, writer, and reader of the target language ought to master for comprehensive and effective communication to occur. If a writer uses a different code than the reader understands, communication would fail partially or completely. (Rossiter, 2021). Likewise, teaching grammar to teach writing skills cannot be separated from the lexical and discourse characteristics of text. Henceforth, grammar instruction that seeks to prepare students for academic studies must be designed to develop practical and useful skills, which are relevant to producing academic writing. (Hinkel, 2023).

Moreover, Christianto and Pratama (2015) established in a study they conducted that "many students hate learning grammar" (p. 80). They concluded that this was a result of the following causes: students do not understand the significance and practicality of learning grammar, students lack confidence in their competence to use grammar to communicate, students do not find the materials engaging, and the quantity of information is overwhelming to students. Therefore, Hinkel (2023) pointed out, teachers should identify and select the grammar constructions that are required and useful to be taught and skip those that learners do not need to save time and make English grammar teaching and learning more effective.

"Teaching the whole gamut of English grammar when a great deal of it is patently useless to students may be one reason that explicit grammar teaching is often seen as a tedious exercise" (Hinkel, 2013, p. 6). Relatedly, Hans and Hans (2017) concluded that writing is an intricate and challenging task for a large number of students, and that teachers should emphasize the grammatical concepts that are necessary and convenient for the clear transmission of meaning.

Conclusion

Proficient written communication is an indispensable skill in both academic and professional settings, and the ability to articulate one's ideas coherently and effectively is a determining factor in his/her success. In conclusion, in this digital era, writers often search for tools and programs that could help enhance and correct their writing, ensuring its clarity and correctness. Moreover, a particular tool has caught the attention of writers in the English language; its name is Grammarly, an online website/application that employs artificial intelligence (AI) algorithms to provide users with grammatical, lexical, and spelling corrections in addition to plagiarism checks. Grammarly has both a free and a paid version that offer a set of features to its users; these services include grammar, spelling, and punctuation error checking and correction, in addition to style enhancement suggestions and plagiarism detection. However, despite Grammarly's remarkable advantages, it presents certain disadvantages; for instance, its inability to accurately evaluate subject relevance, in addition to its tendency to overcorrect. Ultimately, grammar is the foundation of meaningful and purposeful communication, whether oral or written; therefore, efficient academic writing starts with a solid command of grammar.

Chapter Two

Reducing Errors in Academic Writing

Introduction

Academic writing is a particular genre of writing that is used in higher education contexts to demonstrate knowledge and contribute information in specific academic fields. Academic writing represents the foundation in tertiary education and scholarly communication. It functions as the main medium through which scientific research is established, shared, and evaluated among academic individuals and communities. Henceforth, honing academic writing is fundamental for students, professors, scholars, and researchers aiming to contribute significantly to their corresponding disciplines of research. Therefore, this chapter seeks to provide a brief yet comprehensive theoretical overview of academic writing, starting with discussing writing as a cognitive process and a skill, and defining academic writing. The chapter, next, outlines key features and characteristics that distinguish academic discourse from other types of discourse; the characteristics mentioned include planning and organization, formality and objectivity, coherence and cohesion, authenticity, and purpose. Following this, the chapter explores the main types of academic writing, namely, the essay, the research paper, and the dissertation. Finally, the chapter discusses and illustrates the types of errors commonly committed in academic writing, grammatical errors, word choice or lexical errors, spelling mistakes, and punctuation mistakes.

1. Academic Writing

Writing, according to Kuo (1995), is a thinking process throughout which the writer is constantly making decisions on lexical choices, structural options, and possible organization for the information and ideas; in addition, writing is always guided by a given purpose or goal expected by a given audience. Likewise, Writing is a productive language skill, which according to per Bello (1997), plays an indispensable role in promoting language acquisition; this happens through experimenting with words, sentences, and large chunks of writing and making use of the proper grammar and vocabulary to communicate the intended ideas and

reach desired outcomes. According to Ibnian (2011), writing is one of the most important skills that EFL learners must develop throughout their education.

Moreover, Oshima and Hogue (2007) discussed that writing is of three kinds: creative writing (e.g., stories), personal writing (e.g., letters and e-mails to friends and family), and academic writing. Creative and personal writing are informal types of writing, in which a writer could use informal language (slang), abbreviations, and incomplete sentences, unlike academic writing, which is a formal kind of writing, in which writers do not use informal language or contractions and the sentences are complete and ideas are organized.

Additionaly, academic writing according to Irvin (2010) involves more than writing because it also serves as an assessment tool for demonstrating disciplinary thinking and presentation abilities. To achieve successful academic writing, the writer ought to be completely aware of the purpose of the paper being written and what is expected of him/her to accomplish with that particular writing task.

2. Characteristics of Academic Writing

Academic writing is a meticulous type of writing and it is characterized by a number of qualities; namely, planning and organization, formality and objectivity, coherence and cohesion, authenticity, and purpose.

2.1 Planning and organization

In academic writing, ideas are ordered and structured logically with verified points (Gillet et al. 2009). Added by Yakhontova (2003), logical connectors or linking words and phrases are essential in a piece of writing since they help establish a logical relationship between ideas within a sentence or between sentences and help with smoothing the flow of ideas or information. Logical connectors, as she mentioned, are guideposts for readers that help them comprehend the text better. Additionally, Widodo (2017) claimed that every good composition has unity from the beginning to the end, for it to successfully convey the intended

message or information to the readers. Without any logical order, a composition would be difficult to follow and, as a result, confusing and ambiguous in meaning.

2.2 Formality and objectivity

The style of English academic writing is always formal and is characterized by the use of an appropriate academic vocabulary and the absence of conversational features. As per Widodo (2017), appropriate diction is an essential component of academic writing, and without apt vocabulary, writers cannot communicate their message effectively. Furthermore, writers of academic texts should avoid contractions, interjections and hesitation fillers, Phrasal verbs, addressing or asking the reader directly, adverbs in initial or final positions, short forms of words or slang, and figures at the beginning of the sentence (Yakhontova, 2003). Furthermore, academic writing sustains an objective and scholarly tone, which indicates adopting a suitable point of view and avoiding the use of personal pronouns ("I" or "we"). Correspondingly, Monippally et al. (2010) ascertained that in all categories of academic writing, the author's personal feelings play no role whatsoever in the presentation of ideas or insights.

2.3 Coherence and cohesion

Kuo (1995) mentioned that writing is a dynamic process and constructing text entails links at various levels, including lexicon, grammar, and organization. Kuo (1995) distinguished cohesion and coherence by defining each separately. On one hand, cohesion is concerned with the grammatical and/or lexical relationships between the ideas in a piece of writing (including within-sentence, inter-sentence, and cross-sectional lexical or structural interdependency) and is determined by lexical items and grammatical structures. On the other hand, coherence refers to the relationships among elements of a text on the deep level; the relationships from themes, organization of information, and communicative purpose of a specific text. Furthermore, Poudel (2018) argued that coherence and cohesion are essential

properties of texts in academic writing, which refer to intra-text connectedness and the contextual fitness of the ideas.

2.4 Authenticity

Barnett (2007) defines authenticity as weighing things differently, handling and using resources in one's own way; in addition, authenticity is being involved, being active, and is both having resources at one's command and maneuvering those resources. Moreover, authenticity in academic writing is defined by Chuikova (2018) based on three basic requirements. The first requirement includes containing original content or ideas, which are compiled via critically evaluating given facts and existing knowledge. Second, following the conventions acknowledged in the academic context shapes the academic writing competency. The third requirement is regarding adapting to culturally determined qualifications in the academic context in the case of switching from one's native language to a foreign one. Additionally, authenticity is a central characteristic of academic writing. As explained by Werdiningsih (2024), authenticity includes the unique voice, cultural nuances, and the writer's personality that reflect the writer's individual experiences and background. Therefore, authentic writing is relatable and compelling, and it conveys authentic intentions, emotions, and perspectives.

On another note, academic writers, traditionally, sought feedback from peers or teachers to navigate creative obstacles; however, AI has emerged and is now used as a new assisting instrument in improving the quality of a text or in alleviating writer's block. As per Carvalho and Ivanov (2024), advanced AI writing tools generate relevant and contextually accurate content rapidly and remarkably efficiently. Werdiningsih et al. (2024) explained that the boundary between student-created material and AI-generated content has disappeared which damages the academic authenticity. Moreover, ensuring authenticity in academic writing is a necessity and a responsibility that requires vigilance, collaboration, and a

commitment to maintaining the highest standards of academic integrity. Via identifying the types and nuances of plagiarism, employing technological tools for rapid and easy detection, promoting ethical academic conduct and integrity, and addressing the root causes of unethical behavior, we will be able to deter plagiarism in academic writing (Shahid et al., 2024).

2.5 Purposefulness

Academic writing is intended for a specific audience, such as students, professors, or specialists, and it has a particular goal to achieve. According to Kuo (1995), any piece of writing has a communicative purpose; thus, the writer is always purpose- and goal-guided as he/ she is planning and advancing the written discourse. Moreover, Severino and Prim (2015) agreed that the first step in developing academic writing is through using a process of planning, drafting, revising, and editing while remaining aware of the purpose of the test under the requirements of the audience.

3. Academic Writing Genres

Academic writing comes in numerous types, including essays, research papers, dissertations, and theses.

3. 1 The Essay

Hamp-Lyons (1988) defined the academic essay as a "game" with a set of rules on the syntactic, semantic, discourse, and pragmatic levels in which the writer seeks to satisfy the demands of the reader or marker of the essay through following the rules. Moreover, Ibnian (2011) defined the essay as a short literary composition on a specific matter expressing a specific view.

The essay consists of three parts, namely, the introduction, the body, and the conclusion. The first part of an essay, the introduction, is aimed at introducing the reader to the essay; it determines the dissertation statement and the key ideas that will be discussed in the

essay, and the order in which they will be mentioned. The introduction's role is to present the significance of the essay and to convince the reader to read it. The second part of the essay, which is the body, contains several body paragraphs that contain the supporting ideas or the arguments of the essay in detail. Body paragraphs are presented in logical order, and each one starts with an introductory topic sentence. Third, the conclusion fulfills two specific functions: summarizing the contents of the body paragraphs and providing a final thought on the writer's point of view. (Ibnian, 2011).

Additionally, Ibnian (2011) categorizes the academic essay into four types: namely, the expository essay, the descriptive essay, the argumentative essay, and the narrative essay. Firstly, the expository essay is the analytical or information essay; it explains and analyzes a given topic or problem, investigates an idea, evaluates evidence, elaborates an idea, and presents an argument concerning that idea. Secondly, the descriptive essay's objective is to describe an object, person, setting, experience, emotion, or a situation. Thirdly, the argumentative essay is an essay that aims to persuade the reader of the writer's point of view by providing supporting evidence, arguments, and instances. Fourthly, the narrative essay is the type of essay that tells a story, generally comes in a conversational style, and narrates a true or a fictional story.

3.2 The Research Paper

A research paper is a lengthy essay in which students exhibit what they learned from a course using their ideas, as explained by Serria College (2013). In addition, a research paper is defined by Winkler and Metherell (2010) as a piece of writing that is typically five to fifteen pages long and follows the rules of scholarly writing. As per Geller (2018), a complete research paper is usually comprised of a title page, abstract, introduction, methods, results, discussion, and references sections.

3.3 Dissertations and Theses

Writing a dissertation or a thesis is considered one of the eminent forms of academic writing. As mentioned by Kimp (2007), the purpose of a dissertation or thesis is to demonstrate the ability to successfully communicate information on a selected topic or matter on a professional level, and the audience of dissertations and theses is a professor, a committee in higher education, or a department of the college. This audience expects high-quality, professional, and academic writing. The terms "dissertation" and "thesis" could be used interchangeably, as attested by Kennedy (2014). Contrastingly, Enago Academy (2023) explains the difference between a thesis and a dissertation by providing a distinct definition for each. On one hand, a thesis is a carefully written scholarly piece of research work, customarily submitted by master's students to graduate. On the other hand, a dissertation is a longer piece of writing than a thesis. It accounts for a doctoral student's research work throughout the doctoral program. After submitting and defending the dissertation, the researcher earns his/her Ph.D. A dissertation details all information on the original research on a novel or existing topic undertaken by the Ph.D. candidate.

4. Types of Errors in Academic Writing

Even though EFL learners are being taught writing courses and various techniques are being implemented by teachers to enhance their writing skills, students still face difficulties and challenges when completing their written assignments. Most students commonly have problems with grammar, vocabulary usage, word spelling, and punctuation.

4.1 Grammatical Errors

Farooq (2012) claims that English language learners face difficulties in grammar, which is considered the most difficult aspect of writing. There are several areas where EFL learners encounter problems when writing sentences and paragraphs. These areas include

issues like subject-verb agreement, parallel structure, placement of modifiers, and verb tenses. Equally, Al Fadda (2012) stated that EFL students face problems in using subject-verb agreement. In addition, Anh et al. (2022) mentioned a list of common grammatical errors in academic writing, these errors included the use of articles, verb tenses, the passive voice, and subject-verb agreement. According to the literature, the commonly recurring grammatical mistakes in English writing include subject-verb agreement, article errors, and verb tense errors.

4.1.1 Subject-Verb Agreement Errors

Wee et al. (2010) explained that in English grammar, it is compulsory that the verb agrees with the subject, which means a singular subject takes a singular verb and a plural subject takes a plural verb. In the present simple tense, the third-person pronouns "he, she, and it" take a singular verb with the -s inflection. For instance, "The girl/He/She/The cat eats," whereas the plural subject and pronouns "We, You, and They" take the stem form of the verbs. For example, "The girls/ women/ You/ We eat". Wee et al. (2010) added that the rule that -s/-es/-ies inflection is used in the verbs after the third person singular misleads students since there are exceptions to the rule; for example, in WH or auxiliary questions that start with "does" and in verbs that come after a modal. Therefore, when lecturers make contradictory statements, the learners would get confused. Added to Singh et al. (2017), students face problems with subject-verb agreement because the verbs follow their subjects closely, and the number of the subject is unclear. Additionally, Alahmadi (2019) categorized subject-verb agreement errors made by EFL students in writing in English into three categories, namely, subject-verb agreement errors with singular subjects, subject-verb agreement errors with plural subjects, and subject-verb agreement errors where the main verb or auxiliary verb is compounded with or separated from the subject. Alahmadi (2019) further reported that although these students'

sentences were not entirely grammatically incorrect, the students could not use the subject-verb agreement rule correctly, which in turn indicates inadequate language competence.

4.1.2 Article Errors

Gressang (2010) concluded that both native and non-native student writers make errors in terms of determiners. Furthermore, students make mistakes when it comes to determiners because they establish their own idiosyncratic rules for when and how to use determiners; however, their rules do not always apply. Furthermore, a common type of determiner error students commit is article errors. There are two types of article errors: not writing any article or writing the wrong article, according to Gressang (2010). Moreover, Atibrata (2012) drew similar conclusions; their results suggested that students writing in English had the greatest difficulty in using articles. The same students did not appear to face difficulty using demonstratives, possessives, and quantifiers (Atibrata, 2012). Correspondingly, it has been discussed by Khansa and Purnamasari (2024) that the most common type of determiner errors is article errors, and most errors students make are omitting the articles in their writing. They deduced that the students have difficulties using articles when writing in English, whereas they do not seem to have much trouble using the other types of determiners (demonstratives, possessives, and quantifiers).

4.1.3 Verb Tense Errors

Garrido and Rosado Romero (2012) concluded that EFL students face difficulties in conjugating verbs in English; this is due to students having problems concerning both the choice of aspect and the choice of tense. Karim et al. (2015) explored several verb tense errors, these errors include missing verbs in a sentence, misusing verb tense, misusing past tense after infinitives, and misusing the "to have" verb. Similarly, Singh et al. reported that EFL students

use auxiliary verbs inappropriately, in addition to having difficulty distinguishing the use of the verb "to have" according to the context. Furthermore, Mayaratri (2020) asserted that verb tense errors are very common grammar errors in written English. Mayaratri (2020) elaborated that the tenses that students struggle most with are present simple and present continuous, even though present simple is the most commonly used tense and one that students study first.

4.2 Word Choice Errors

Word choice refers to the cautious selection of words to correspond to the audience, topic, and purpose of writing a given text, which directly affects meaning. Paying attention to diction accuracy in an academic piece of writing is crucial to produce an understandable and meaningful text. (Widodo, 2017). Given its importance, learners often encounter different problems when selecting the proper vocabulary to opt for. Al Fadda (2012) claimed that EFL learners face challenges in distinguishing between spoken and written words in addition to struggling with generating ideas to write on their assigned topics. Furthermore, Widodo (2017) detailed a list of common issues regarding word choice in academic writing. These errors include misused words, words with non-desired meanings or connotations, using a pronoun that readers cannot tell whom/what it refers to, use of difficult jargon and technical terms, unnecessarily loaded language, and redundancy and wordiness. Similarly, Severino and Prim (2015) categorized areas where writers in English commit lexical errors. These areas include translation from the mother tongue, incorrect context, synform, idiomaticity, precision, and register.

4.3 Spelling Mistakes

Even though the majority of the words in the English language have a predictable orthography, the spelling system of English is still challenging for both native and non-native users of the language. (Lastres-López & Manalastas, 2017). Cook (1999) classified spelling

mistakes into four categories: substitution, omission, insertion, and transposition. Raheem and Ghafar (2024) provided examples of each of the types. First, omission errors included learners writing "lit" instead of "light" and "brek" instead of "break". Second, with substitution errors, learners replace the correct letters with incorrect ones; for instance, "there" instead of "their" or "believe" instead of "believe". Third, insertion errors occur when learners add unnecessary letters to words, such as writing "read" instead of "red". Fourth, transposition errors include swapping the order of letters, like writing "fromation" instead of "formation". Furthermore, Lastres-López and Manalastas (2017) classified and categorized spelling errors into four types; namely, phonologically related errors (e.g. homophones and minimal pairs), absence or presence of a grapheme (e.g. adding a consonant or a vowel, doubling a consonant or a vowel, or double consonant not doubled), incorrect choice of grapheme (e.g. incorrect vowel or consonant), and splitting of the word.

4.4 Punctuation Mistakes

"Punctuation is everything in written language", argued Widodo (2017, p. 20). Correspondingly, Katiya et al. (2015) agreed that punctuation is a pivotal aspect of writing, habitually disregarded in favor of grammar, particularly for ESL and EFL learners. Mastering the use of punctuation is equally fundamental as mastering grammar to produce clear and articulate writing. Punctuation includes interword spaces, capitalization, and punctuation marks, which are the symbols that indicate the structure and organization of written language, in addition to the intonation and pauses to be observed when reading aloud. (Widodo, 2017). Furthermore, punctuation errors are one of many forms of grammatical errors that could confuse and obscure, or easily change the meaning. Hans and Hans (2017) argued, "even something as simple as a misplaced comma can completely change the meaning of a sentence. For example: "Let's eat grandpa" vs "Let's eat, grandpa." (p. 41).

Raheem and Ghafar (2024) explained that the most common punctuation mistakes EFL students commit are capitalization and misplaced commas and periods. Additionally, Lastres-López and Manalastas (2017) classified punctuation mistakes into eleven more detailed categories. Their classification included incorrect use of comma (i.e., absence), incorrect use of comma (i.e., unnecessary), incorrect use of comma (i.e., splicing); incorrect use of period (i.e., absence), incorrect use of period (i.e., comma sufficient), incorrect use of period (i.e., space missing). Moreover, absence of apostrophe in contraction, absence of apostrophe for genitive, absence of hyphen for modifier, incorrect capitalization (i.e., unnecessary), and incorrect capitalization (i.e., proper noun).

5. The Role of Feedback in Academic Writing: From Traditional Methods to Grammarly

Feedback plays a fundamental role in academic writing because it enables students to meet the criteria for scholarly communication while advancing their current writing skills (Hyland & Hyland, 2019; Ferris, 2014). The traditional academic writing feedback system includes teacher comments along with verbal exchanges and peer evaluations to guide students in recognizing their writing strengths while improving their arguments and accuracy, and clarity (Bitchener & Ferris, 2012; Lee, 2017). Foreign Language (EFL) students require feedback the most since it covers both basic language problems with advanced elements, including structure, logical flow, and academic voice (Hyland, 2019).

Academic writing feedback has undergone a significant transformation since the introduction of digital tools and AI-based assessment systems in recent years. The Automated Writing Evaluation (AWE) tools, which include systems like Grammarly, present customized instant feedback for writing areas that include grammar, punctuation, style, and plagiarism detection according to several academic studies (Li, Link, & Hegelheimer, 2015; Ranalli, Link, & Chukharev-Hudilainen, 2017). AWE tools deliver immediate feedback, which traditional

methods do not achieve because of factors like limited teacher capacity and school administrative constraints. This enables students to resolve their mistakes at once, thus developing independent editing abilities (Roscoe et al., 2017; Ranalli, 2018). The implementation of these tools brings forward significant issues about feedback quality, depth, and amount, as well as the dangers of becoming overly dependent on automated systems and the connection between tools and traditional teaching approaches (Lai & Zheng, 2018; Hyland & Hyland, 2019). The study will examine how Grammarly feedback affects first-year English students at Mohamed Khider University of Biskra, particularly focusing on the advantages and disadvantages of using technology-based feedback systems in higher education.

5. **Assessment in Academic Writing: Evolving from Traditional Evaluation to Grammarly**

Academic writing uses evaluation as its fundamental element to measure student comprehension of academic rules alongside their capacity to present ideas and their complete language skills (Weigle, 2013; Hyland, 2019). Academic writing assessment throughout history has used teacher judgment alongside rubrics and standardized criteria to examine how students organized their work and maintained cohesion between ideas and their use of grammar and academic vocabulary. The assessment process begins with formative evaluation that occurs throughout the term to help students improve their learning, while summative assessment measures their final writing task outcomes (Bitchener & Ferris, 2012). English as a Foreign Language (EFL) learners find the assessment process crucial because it both identifies grammar accuracy problems and enables directed teaching strategies for their improvement (Lee, 2017).

Educational systems experience technological expansion, which leads to advancements in academic writing assessment through computerized and AI elements (Godwin-Jones, 2018; Kukulska-Hulme, 2020). Grammarly's Automated Writing Evaluation (AWE) systems now

provide students with immediate feedback based on data for grammar and punctuation and vocabulary and style, which enables students to take more control in self-assessment before their teachers grade their work (Li, Link, & Hegelheimer, 2015; Ranalli, Link, & Chukharev-Hudilainen, 2017). The combination of automated tools with traditional assessment approaches supports independent learning but generates concerns about the reliability and validity of automated feedback and potential student dependence on this type of assessment (Lai & Zheng, 2018). The understanding of how such tools operate and are understood by users must drive the development of proper assessment techniques for academic writing within universities.

Conclusion

Writing is an essential skill for EFL learners, and Grammar is an essential aspect in any good piece of writing. There are several forms of writing, one of which is academic writing. Academic writing is a formal style of writing that is predominantly used in academic contexts to discuss and contribute ideas, information, and knowledge in the academic world. It is the system through which knowledge is disseminated across the globe. In conclusion, academic writing has a set of distinguished characteristics; namely, formality, logic, objectivity, planning and organization, coherence and cohesion, authenticity, and it aims to achieve a certain purpose. Furthermore, the types of academic discourse vary, including essays, research papers, dissertations, and theses. Additionally, despite efforts and time allotted for learning and promoting academic writing, writers in the English language, specifically non-natives, struggle with certain areas when it comes to producing correct and effective texts. Some of the common problems writers encounter include grammatical errors (subject-verb agreement, article usage, and verb tenses), word choice or lexical errors, spelling mistakes, and punctuation mistakes. Feedback and assessment are important factors in working through these ongoing issues, as they serve to guide students in a more productive way towards the conventions of effective and accurate writing. Digital tools like Grammarly enable students to receive more immediate,

automated feedback and additional assessment, which can assist them in developing their

academic writing to a greater extent than more traditional methods.

Chapter Three: Data Analysis and Interpretation

Introduction

Research is a systematic method of obtaining answers and explanations to numerous topics and issues. This chapter presents the field work of the research study in hands. In order to investigate the influence of Grammarly on reducing grammatical errors in academic writing, A questionnaire with master one' students and an interview with teachers were conducted. It outlines the research design and methodology and presents the analysis and interpretation of the data collected. The findings, thus, lead to answering the research questions.

3.1. Research Approach

A research approach refers to the overall strategy or framework that guides how a study is conducted, outlining the specific steps, methods, and procedures used to collect, analyze, and interpret data in order to address the research problem effectively. Since this study aims to examine Grammarly's role in reducing grammatical errors in academic writing, the mixed-methods research design was adopted, as posited by Creswell and Plano Clark (2018), to combine the strengths of both quantitative and qualitative data. This approach blends quantitative data from closed-ended questionnaire items to reveal statistical patterns in student experience and Grammarly usage, with qualitative data from open-ended questionnaire responses and teacher interviews to more deeply illuminate perceptions and problems. As Creswell (2014) suggests, mixed-methods research is particularly valuable when a single approach is insufficient to develop a comprehensive sense of a research problem, facilitating a more thorough investigation of Grammarly's efficacy, the most beneficial aspects of Grammarly, and students' and teachers' perceptions of automated writing support. This mixed methods approach is extremely well-suited to educational technology research and ensures that both measurable outcomes and personal views are addressed (Johnson, Onwuegbuzie, & Turner, 2007).

In addition, this study adheres to a descriptive research design to provide a true and contextualized assessment of Grammarly's role in reducing errors in academic writing. This research design is suitable because the study aims to gather detailed descriptions of the experiences, attitudes, and perceptions of Grammarly from participants without controlling variables or testing specific hypotheses. By focusing on Master One EFL students at Mohamed Khider University of Biskra, the research enables a close understanding of how Grammarly functions as a writing support tool within the context of an academic environment. Data were collected through a semi-structured questionnaire and guided interviews. The quantitative data were submitted to descriptive statistics to summarize trends and patterns, and qualitative responses were submitted to thematic analysis to identify and interpret prevailing themes related to participants' experiences and perceptions. The use of both descriptive and thematic analysis in combination allows deep and detailed information about the phenomenon under investigation.

3.2. Sample of the Study

Due to time limitations, the researcher selected a small sample to conduct the research and gather the data needed to answer the research questions.

❖ **For students:** This study targeted Master-One students of the English Division at Mohamed Khider University of Biskra. The reason behind choosing Master-One students is that they are required to produce a higher volume of academic writing to carry on their research in the next year, which leads to more frequent use of Grammarly as a writing support tool. A purposive sampling technique has been chosen, in which only those who use Grammarly or at least have knowledge about the tool are selected to be part of the study. Therefore, a total of thirty-three (33) students' responses were collected.

❖ **For teachers:** The sample used for this study is (4) EFL teachers at the English Division of the University of Biskra. We used a purposive sampling technique in which only those who teach or have taught academic writing were selected to be a part of our research. The reason behind choosing this sample is that the researcher aimed at investigating teachers' perceptions and opinions on the Influence of Grammarly on Reducing Grammatical Errors in Academic Writing.

3.3. Students' Questionnaire

3.3.1 Aim of the Questionnaire

The questionnaire aims to gather in-depth insights into the experiences, perceptions, and attitudes of Master One EFL students regarding their use of Grammarly. Specifically, the questionnaire seeks to explore how students engage with the tool in the context of academic writing and how they perceive its effectiveness in identifying and reducing grammatical errors.

3.3.2. Description of the Questionnaire

The students' questionnaire consists of twenty-two (22) questions that encompass open-ended and closed-ended questions. The open-ended questions aim to give students the freedom to express their perceptions, ideas, and experiences in their own words. This is done in order to provide richer, more detailed insights into their use of Grammarly and its perceived impact on their academic writing development. On the other hand, close-ended questions were critical to ensure that the students' responses remain within the research topic boundaries, thus facilitating the collection of structured and relevant data aligned with the study's core objectives.

3.3.3. Validating and Piloting of the Questionnaire

Before the full administration of the questionnaire, a validation and piloting stage was conducted to assess the effectiveness and clarity of the instrument. This stage involved presenting the initial version of the questionnaire to a small group of Master One English students who were not part of the main study sample. The purpose was to evaluate whether the questions were understandable, relevant, and aligned with the research objectives. Feedback from this preliminary group helped identify any ambiguities, redundant items, or technical issues that could compromise the quality of the data. Based on the responses and suggestions received, necessary revisions were made to improve the structure, wording, and sequencing of the questions. This process ensured that the questionnaire was both reliable and valid, ultimately enhancing its ability to elicit accurate and meaningful data during the main phase of data collection.

3.3.4. Administration of the Questionnaire

The questionnaire was administered to Master-One students in the division of English at Biskra University during the academic year 2024/2025. An online form of the questionnaire was created by Google Forms and posted on the Master-One Facebook group, however, the researcher failed to collect responses. Therefore, 35 questionnaire copies were handed to 35 EFL students at Mohamed Khider University.

3.3.5. Analysis of Students' Questionnaire

Section One: Personal Information

Item 1: What is your gender?
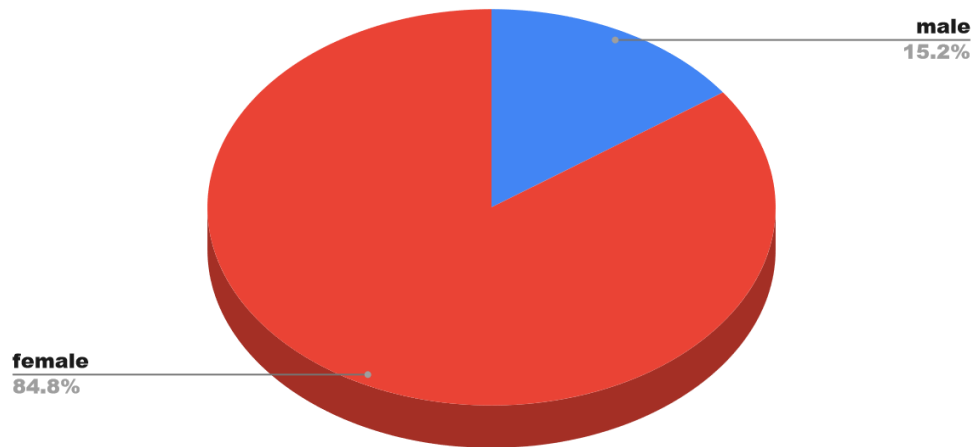
Figure 7: Students' Gender

Figure 3.1 illustrates the gender distribution of our sample. According to the data, **84.8%** of the participants are **females** represented by the red portion of the pie figure, while **15.2%** of the participants are **males** represented by the blue portion. This significant imbalance in gender distribution suggests that females are more interested in EFL learning than males, and hence, form the overwhelming majority of Grammarly users among Master-One students.

Item 2: How would you rate your grammar proficiency level?
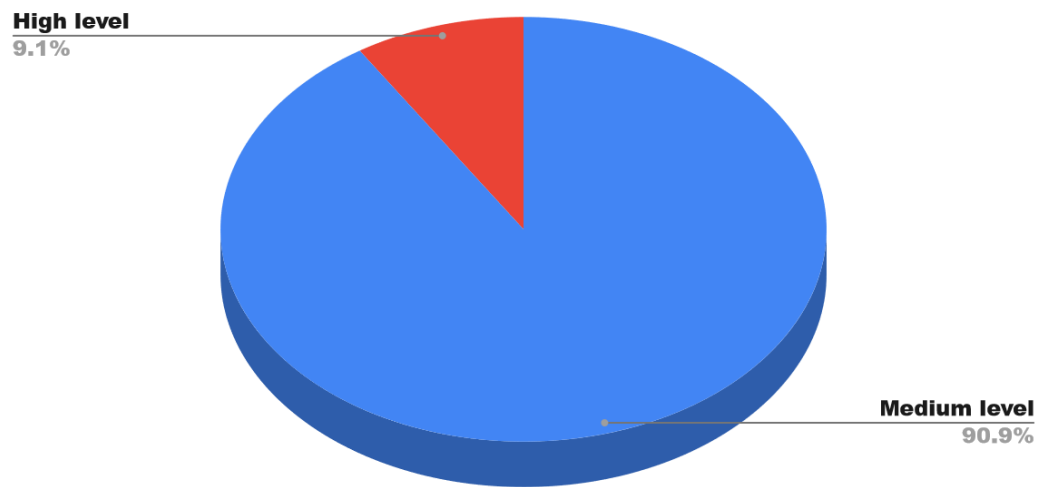
Figure 8: Students' Grammar Proficiency Level

This question aims at classifying the responders based on their grammar proficiency level. Figure (3.2) illustrates that the majority of the respondents have a **medium level** of grammar proficiency **(90%)**, while only **9.1%** see that they have a **high level** of grammar proficiency. However, none of the respondents consider that they have a **low level** of grammar proficiency. The result shown in the figure above demonstrates that most of the participants encounter difficulties that prevent them from being excellent in grammar.

Item 3: For how long have you been using Grammarly? (Open-ended question)

Non-Users with Awareness
3.0%

Short-Term Use (Less than one year)
30.3%

Long-Term Use (More than two years)
36.4%

Moderate-Term Use (1-2 years)
30.3%
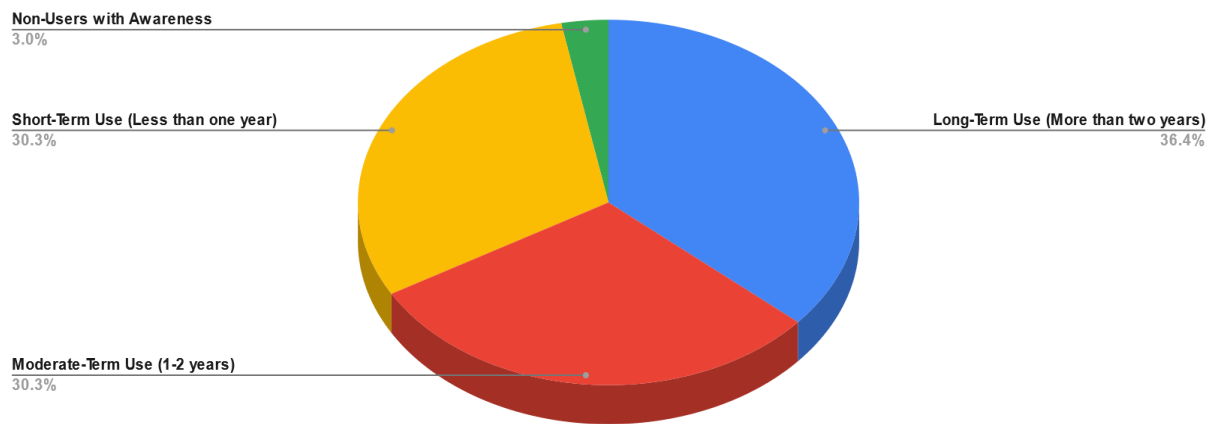
Figure 9: Duration of Grammarly Use Among Students

Figures (3.3) and (3.4) represent the distribution of the Grammarly use duration among Master-One EFL students. The participants were asked an open-ended question, with which we collected varied responses. Thus, we have grouped the data into four categories:

- Long-Term use (2 years+)

- Moderate-Term use (1-2 years)

- Short-Term use (Less than a year)

- Non-users with awareness of Grammarly

According to the data illustrated in the figures above, we notice that **long-term users** of more than two years represent the widest category with **36.4%**. Some of these respondents stated that they have been using Grammarly "since high school" and others "since 1st year", indicating a consistent reliance on this tool. Moreover, both **moderate-term use** and **short-term use** were equally represented, with **30.3%** of the participants. On the other hand, only one student stated that they had awareness about the tool, yet were not a user of it. Overall, the data reveals that all participants are familiar with Grammarly, even if they are not active users of it.

Section Two: Usage of Grammarly

Item 4: How often do you use Grammarly in academic writing?
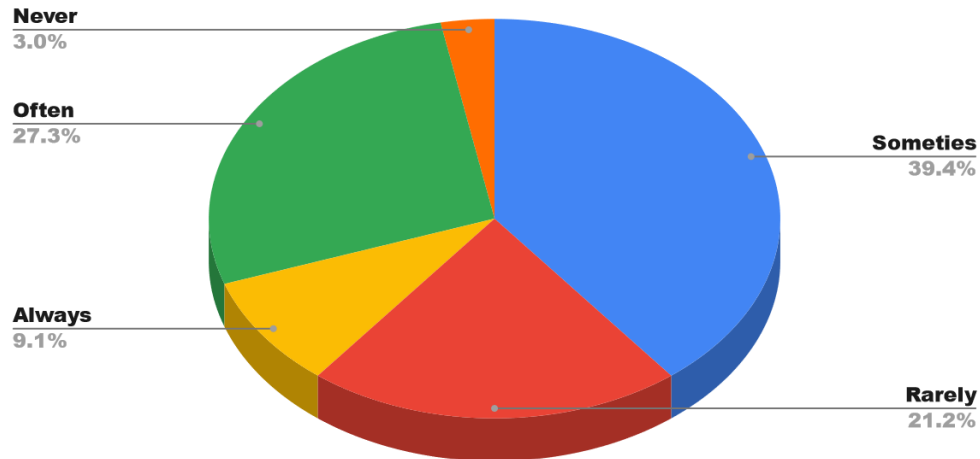
Figure 10: Students' Frequency of Grammarly Use in Academic Writing

This question aims to know how frequently Master-One students use Grammarly as a tool in their academic writing. Figure (3.5) revealed usage data. The majority of students **(39.4%)** reported they "**sometimes**" use Grammarly in their academic writing. This suggests that many students use Grammarly selectively, possibly depending on the importance and difficulty of the writing task. **27.3%** of students indicated they **often** use Grammarly, indicating that a significant number of students use Grammarly regularly in their academic writing routine. However, only **9.1%** of students selected **always,** representing a smaller group that relies heavily on the tool for all academic writing tasks.

Additionally, **21.2%** of the students declared that they "**rarely**" use Grammarly in their academic writing. This shows that some students use the tool only occasionally or as a secondary resource. However, only **3%** of students (one student) reported that they never use

Grammarly in their writing. Overall, the chart suggests that Grammarly is widely adopted, with most students integrating it into their academic writing practices.

Item 5: Which version of Grammarly do you use?
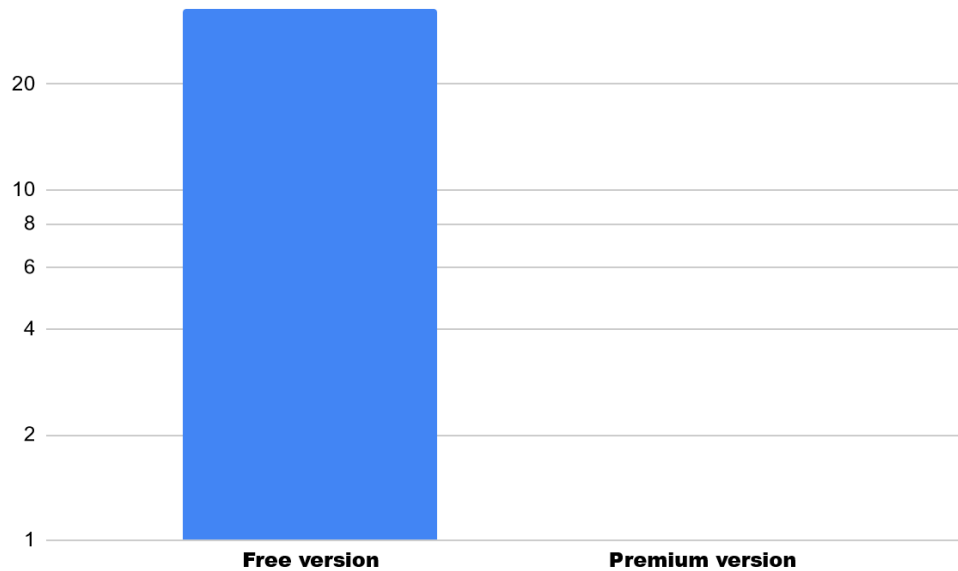
Figure 11: Version of Grammarly Students Use

The figure above displays which version of Grammarly Master-One students use in their academic writing. The results show that all students reported that they use the free version of the tool, and none of them use the premium version. This suggests that while students value the tool for academic writing, financial or accessibility constraints may limit their use of the advanced, paid version.

Item 6: Where do you typically use Grammarly?
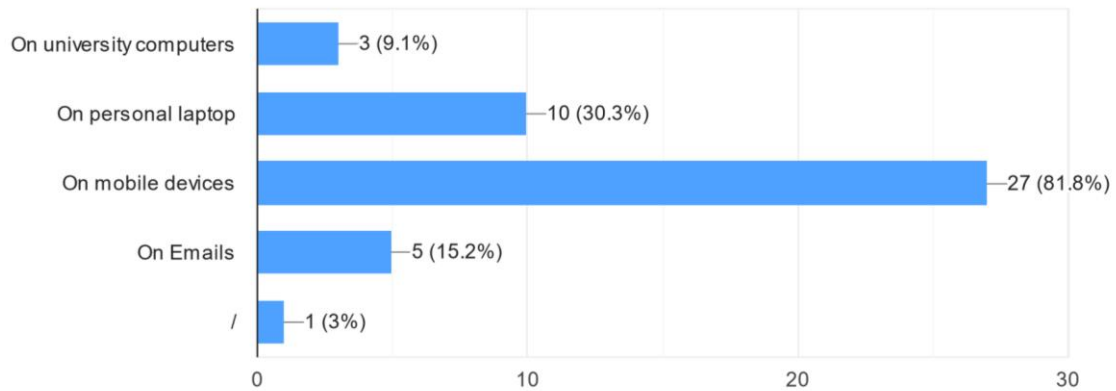
Figure 12: Platforms Where Grammarly is Used

The chart above presents the various platforms on which students use Grammarly. The majority of students (**81.8%**) reported using Grammarly **on mobile devices**, indicating a strong preference for mobile accessibility and convenience. This is followed by **personal laptops**, used by **30.3%** of the students, showing that many also engage with Grammarly through more traditional desktop-based academic work. Fewer students reported using Grammarly **on emails** (**15.2%**) and **university computers** (**9.1%**), suggesting that institutional access and integration into email platforms are limited or less preferred.

Item 7: When do you use Grammarly?
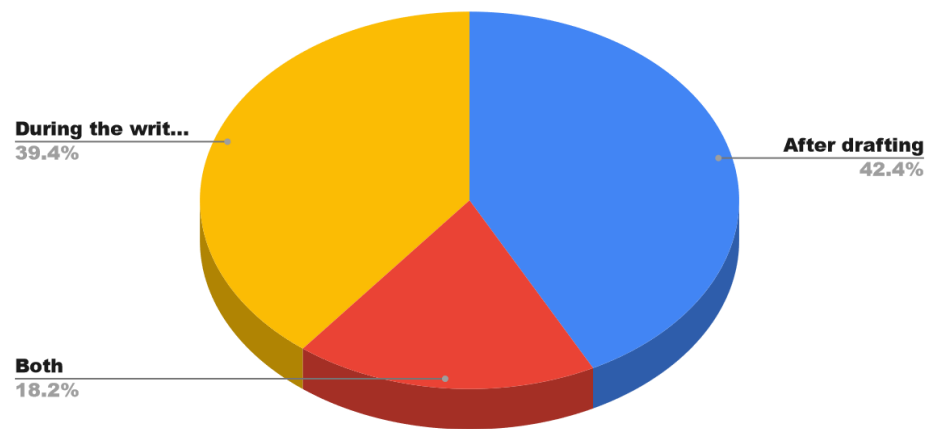
Figure 13: Use of Grammarly in the Stages of the Writing Process

The results obtained via this question reveal varied usage patterns. The figures above demonstrate that a majority of students **(42.4%)** use Grammarly **after drafting** their academic work. Meanwhile, **39.4 %** of the participants reported the use of the tool **during the writing process.** The rest of the students, who make up **18.2%** of the participants, indicated that they use Grammarly **both** during the writing process and after drafting. These results indicate that Grammarly is used by students as a post-writing revision tool and a real-time assistance tool, which highlights its flexibility and role in different writing process stages.

Section Three: Perceptions of Grammarly's Effectiveness

Item 8: How effective is Grammarly at detecting grammar errors?
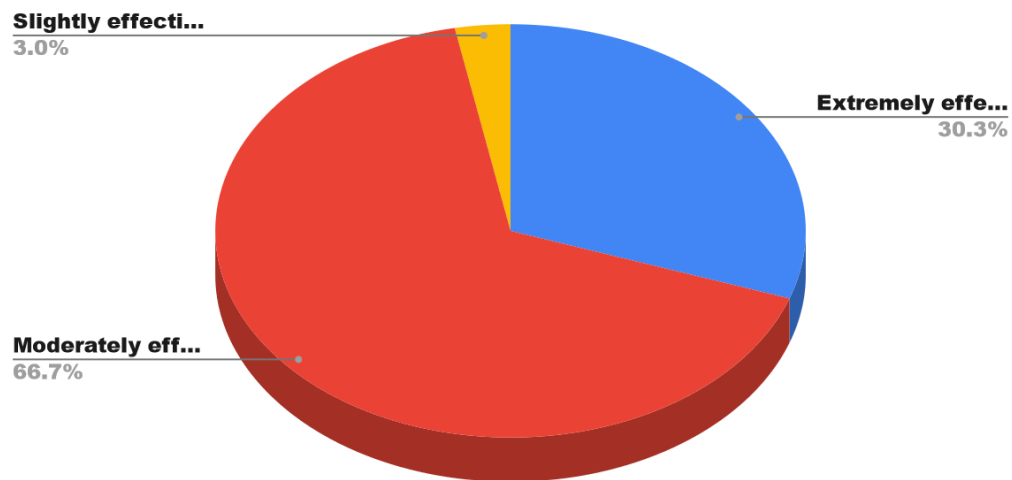
Figure 14: Grammarly's Effectiveness in Detecting Grammar Errors

This item aims to see students' opinions on the effectiveness of Grammarly in detecting grammar errors based on their experiences. The results illustrate that the majority of the students (**66.7%**) see that Grammarly is **moderately effective,** while **30.3%** of them rated it as **extremely effective**. However, only **3%** of the participants reported that the tool is **slightly effective,** and none of the responders rated it as **ineffective.** This overall positive perception highlights Grammarly's usefulness in improving grammatical accuracy in academic writing.

Item 9: What type of grammatical errors does Grammarly help detect the most?
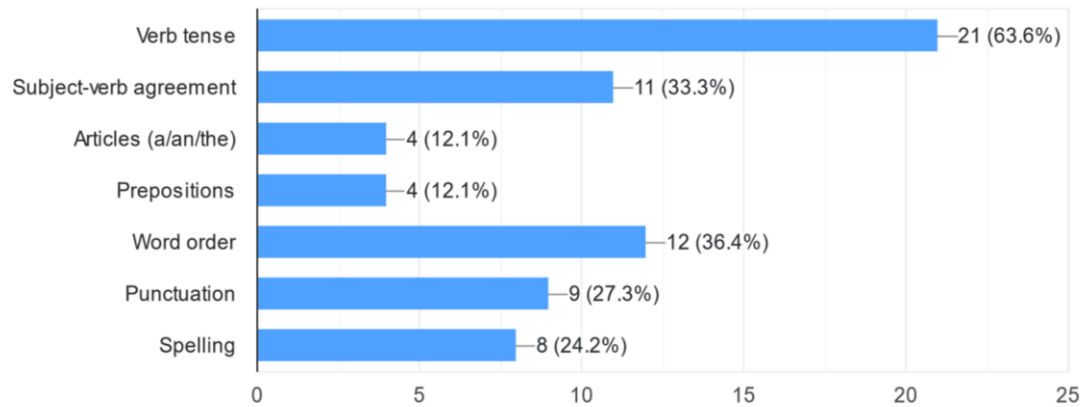
Figure 15: Grammatical Errors Types Detected by Grammarly

This question is about the types of grammar errors Grammarly helps correct best. The chart illustrates that **Verb tense errors** account for the largest share at **63.6%**, suggesting that students frequently struggle with tense consistency and find Grammarly particularly helpful in this area. Following this, **word order** (**36.4%**) and **subject-verb agreement** (**33.3**%) are also common issues Grammarly helps address. **Punctuation** (**27.3%**) and **spelling** (**24.2**%) are also significant, showing Grammarly's value in surface-level corrections. **Articles (a/an/the)** and **prepositions** were the least cited issues, each at **12.1%**, possibly reflecting either a lesser frequency of these errors or Grammarly's limited accuracy in detecting them.

Item 10: After using Grammarly, how often do you seek additional grammar checks/help?
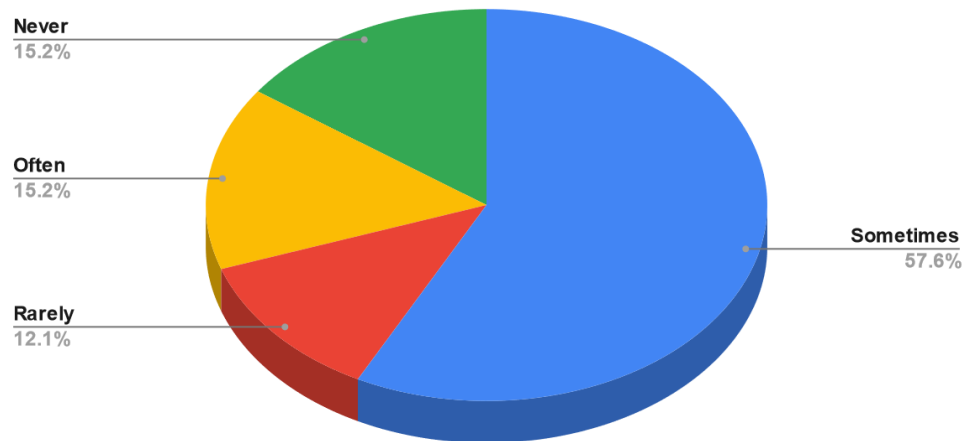
Figure 16: Frequency of Seeking Grammatical Support After Using Grammarly

The figure above illustrates the frequency with which students seek additional help to check their grammar accuracy. **57.6%** of the students reported that they **sometimes** seek extra help, and **15.2%** of the responders said they often look for extra help, while **12.1%** claimed that they **rarely** seek help. While the majority of the responders reported their need to have extra support to check their grammar accuracy, we have **15.2%** of them who claim that they **never** do, reflecting a confidence in Grammarly's reliability. We conclude that many Grammarly users still need to verify their writing using additional grammatical support.

Item 11: To what extent did Grammarly help improve your ability to identify grammatical errors independently?
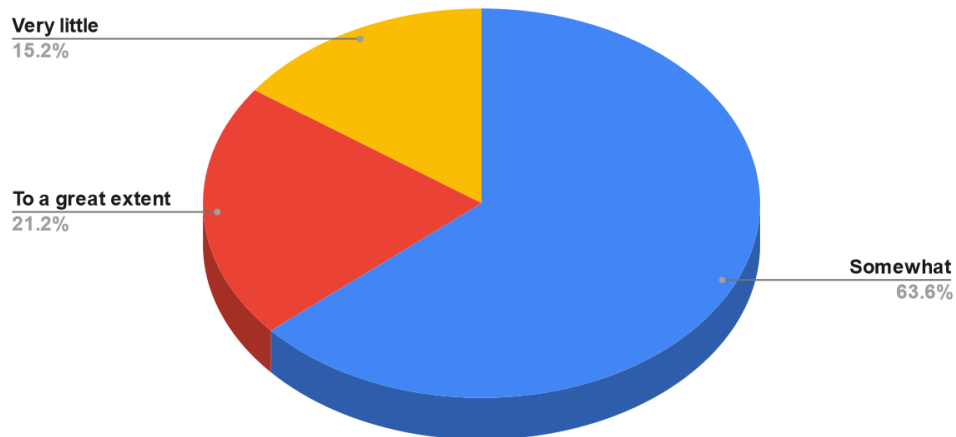
**Figure 17: Grammarly's Impact on Improving Students' Ability to Identify
Grammatical Errors Independently**

The question aims to see if Grammarly has helped students in recognising their grammatical errors without the assistance of the tool. The majority of the students (63.6%) said that Grammarly **somewhat** helped them, while **21.2%** of the students reported that Grammarly helped them improve their ability to detect grammatical errors **to a great extent,** reflecting a great positive impact of the tool. On the other hand, **15.2%** of the respondents felt that Grammarly's impact was **very little,** but none of them said it had **no** impact. Overall, we conclude that Grammarly's impact on improving students' grammar error identification cannot be neglected, yet its effectiveness varies from one student to another depending on their individual experiences.

Item 12: Has using Grammarly improved your grammar proficiency over time? Yes/ No, explain your answer.
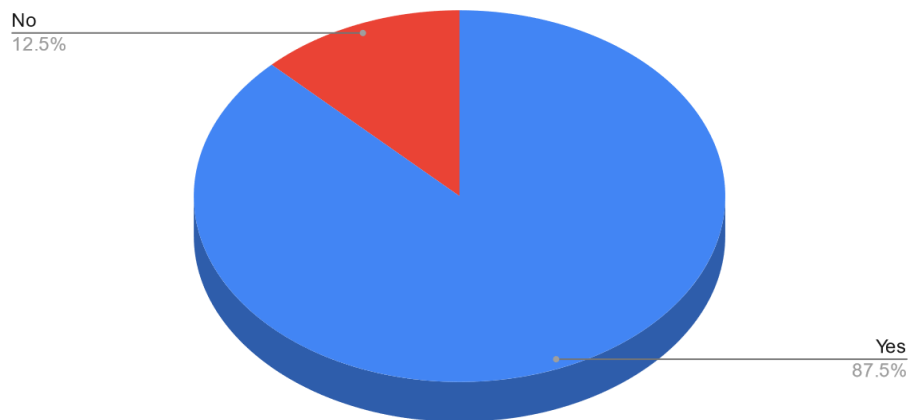
Figure 18: Grammarly's Impact on Improving Students' Grammar Proficiency

This question targets students' experience with Grammarly when it comes to its impact on their grammar proficiency. As demonstrated above, **87.5%** of students, which is the majority, confirmed the impact of Grammarly on improving their grammatical fluency, while only **12.5%** of the responders said that the tool has no living impact. The question is open-ended so that the students have the freedom to write down their own experiences with the tool. The following are some of the students' further explanations of their answers:

For "yes":

- *"Yes, because it shows your mistakes and the right answer."*

- *"Yes, Grammarly has improved my grammar proficiency. I no longer commit errors, especially silly ones such as spelling, punctuation, and also article misposition."*

- *"I believe overtime and after using it for a while, it helped me to reduce my spelling mistakes, and the ability to detect my errors easily."*

- *"Yes, it helps me to improve my grammar level."*

- *"Using Grammarly is sometimes important, personally, it improved my grammar in terms of verb structure, word ordering, and punctuation, so it is yes."*

- *"Yes, after checking my grammar over time and getting the correct form of it, it helped in gettinf known to the grammar correct use"*

- *"Yes, over time I noticed that my writing improved and most mistakes that I made decreased, even spelling mistakes, for example writting>writing"*

- *"Yes, because when I use Grammarly to check my mistakes, I learn from it, and I never commit it again"*

- *"Yes, it has helped me become more aware of grammar rules, and how to correct them"*

- *"After using it many times my level and grammar have improved and rarely when I do. Grammatical mistakes concerning punctuation or spelling."*

- *"Using Grammarly, correct my mistakes so I can remember the mistakes to avoid doing them in future writing"*

- *"yes, Grammarly helps me a lot to improve my grammar proficiency overtime by giving me the correct structure and the mistake that I did. It is really useful to make sure that your sentences are written correctly.*

- *"It makes me identify some habitual Mistakes and common errors that need to get rid of them unconsciously "*

- *"Grammarly helps me to learn the grammar rules and also to correct my grammar mistakes by my own"*

- *"yes, it helped me overcome verb tenses confusion, and word ordering, since Arabic word order interferes sometimes"*

- *"using Grammarly improved my grammar proficiency over time Grammarly not only corrects mistakes also explains why it is incorrect"*

- *"Yes, using Grammarly has improved my grammar proficiency over time. It has improved my use of tenses and punctuation, and subject-verb agreements in the correct way."*

- *"Yes, it did. It improved my writing skills during the years and made me identify the errors"*

- *"Yes, using that helped me so much. Specially, on identifying my errors and tonsils and also subject-verb agreement."*

- *"Yes, because it helps solving errors and grammar errors. Word order."*

- *"Yes, it helps over time to memorise how to use grammar"*

- *"became more conscious and aware of my mistakes, I learned when and how I should use the chances to respect using punctuation, marks and sentence order for a clear sentence. That correction has improved my proficiency in Academic writing."*

For "No':

- *"No, not much since it does. Correct my punctuation mistakes and verb tense errors, but do not seem to learn much from it because it directly corrects without explanation."*

- *"No I can say that I took apps like Grammarly for granted to the point that I don't pay attention to the mistakes. I correct them then pass by."*

- *"No, because it did not explain the rules"*

- *"Not really because I rely on it too much and I don't try to learn from my mistakes. Specifically, spelling mistakes."*

The majority of students explained their positive feedback, citing various factors of improvement in their grammar proficiency, such as spelling, punctuation, subject-verb agreement, verb tenses, word order, and general grammatical awareness: " *it helped me overcome verb tenses confusion, and word ordering"*. Some students reported that they now catch their mistakes before Grammarly does, *"became more conscious and aware of my mistakes"*. On the other hand, a small group expressed a negative opinion about the benefits of the tool. They attributed their negative progress to passive use and over reliance on Grammarly: *"I took apps like Grammarly for granted to the point that I don't pay attention to the mistakes.*

I correct them then pass by.'', or insufficient explanation of the rule: "*do not seem to learn much from it because it directly corrects without explanation*".

Item 13: Do you think Grammarly helps you learn grammar rules or simply corrects your mistakes for you? Please explain.
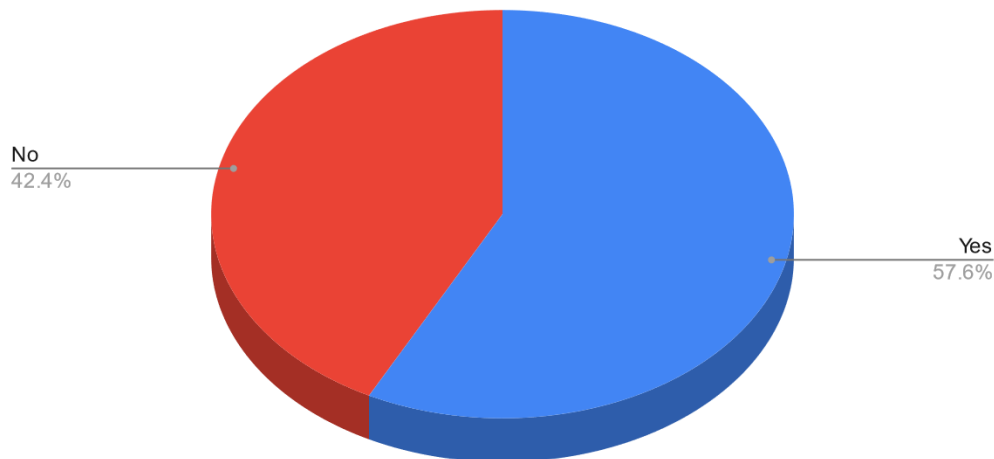
Figure 19: Grammarly Between Teaching Grammar Rules and Correcting Mistakes

For "Yes":

- *"Yes, because it shows how to use grammar rules"*

- *I do rely on it only or simply to correct the mistakes and errors after drafting but I believe that with using it consistently, students may build strong knowledge of grammar rules"*

- *"It does help to learn grammar rules if the learner really pays attention to what he did"*

- *"It helps me to remember grammar rules"*

- *"It does help to learn grammar rules through the exposure of correct grammar forms within it so the more we correct, our grammar with this app aquire the correct grammar rules"*

- *"Yes, of course Grammarly helps to learn grammar rules and correct mistakes"*
- *"I think grammarly Helps with both. It shows the corrections and explains why they are needed which helps me to learn the rules overtime"*
- *"It does both it specifically corrects my mistakes and indirectly helps me to learn grammar rules, and improve my level"*
- *"when grammarly correct my mistakes in the same time, I'll learn some rules"*
- *"in my opinion, Grammarly helps me to learn grammar roles and how to structure is the verb subject, etc. as well. It corrects my mistakes so I think it helps in both."*
- *"it actually provokes to look for grammar rules to ensure our knowledge"*
- *"it helped me to improve my level in my grammar because while I am using it, I learned a rule in the same time"*
- *"how much it helps you learn grammar rules depends on how much you use it"*
- *"it helps me to learn grammatical rules, and be aware of what errors I am doing in writing mostly"*
- *"Grammarly helps learn grammar rules by providing different choices for correcting your mistakes and I will choose the appropriate one and from this, you will learn"*

For " No":

- *"It's simply correct Mistakes, just like other tools. It does not provide any help or instructions about how to properly apply and use grammatical rules"*
- *"Personally, I think Grammarly helps me simply in correcting my mistakes"*
- *"Grammarly correct the mistakes more than just learning grammar"*
- *"I don't think Grammarly help me learning grammar rules. It just helps for correcting. I'm a person who needs to learn the rules to become good at it."*
- *"It helps me only in correcting grammar mistakes as I seek to see the final results"*

- *"It's simply to correct my mistakes because I do not know the use of the rules. I just know the correction."*

- *"For sure it helps in correct in the mistakes however, for teaching grammar rules, I don't think so"*

- *"Grammarly only corrects the mistakes. This application does not help me learn grammar rules because it is built for correcting mistakes. Also, grammar rules can only be taught by teachers."*

- *"I would say that it mostly helped to correct my mistakes rather than learning grammar rule"*

- *"I think the Grammarly simply corrects the users mistakes because it does not provide an explanation of the mistakes and corrections"*

Section Four: Writing Improvement

Item 14: Has Grammarly improved your academic writing skills?
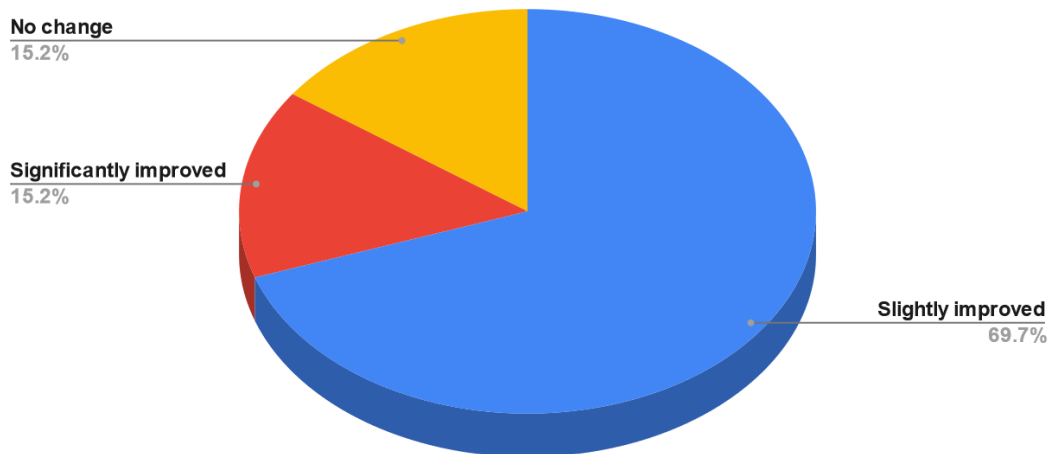
Figure 20: Grammarly Improving Academic Writing Skills

This item aims to see whether Grammarly has an influence on students' academic writing skills. Figure 3.16 demonstrates students' feedback regarding this question. It is

noticeable that the majority of the responders **(69.7%)** reported that Grammarly **slightly improved** their academic writing, while a smaller group **(15.2%)** expressed a **significant improvement**. However, an equal percentage of the responders **(15.2%)** reported that Grammarly had **no change** in their academic writing skills. Overall, we can observe that Grammarly has a positive influence on the majority of the students that can vary from moderatly to highly beneficial, it can hava no impact at all on others, which might be a reflection of either limited engagement with the tool's features or a reliance on it without internalising its suggestions.

Item 15: Which writing skills improved MOST with Grammarly?
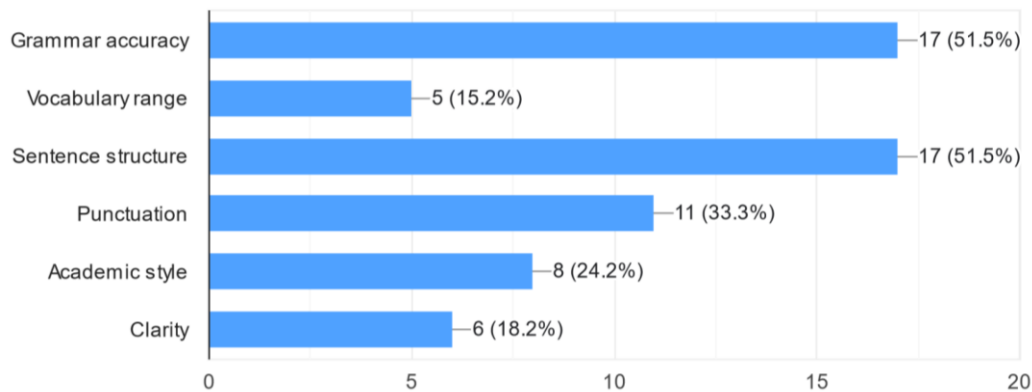
Figure 21: Grammarly Improving Academic Writing Skills

This item seeks to know which writing skills were improved most by Grammarly, according to students' experiences. The figure above demonstrates that **51.5%** agreed that Grammarly improved their **grammar accuracy**, and an equal percentage **(51.5%)** reported that **sentence structure** skill was most improved by the tool. Punctuation skill ranked third as the most improved writing skill with selected by **33.3%** of the participants. Following, **24.2%** of students said that Grammarly improved their Academic writing most. Clarity **(18.2%)** and vocabulary range **(15.2%)** ranked last as the most improved writing skills based on students. We conclude that Grammarly has an impact on improving various writing skills according to students' experience with the tool, but mostly, it has a big influence on grammar skills.

Item 16: Has Grammarly helped you reduce your dependency on external proofreading (e.g., from peers, teachers, or editors)?
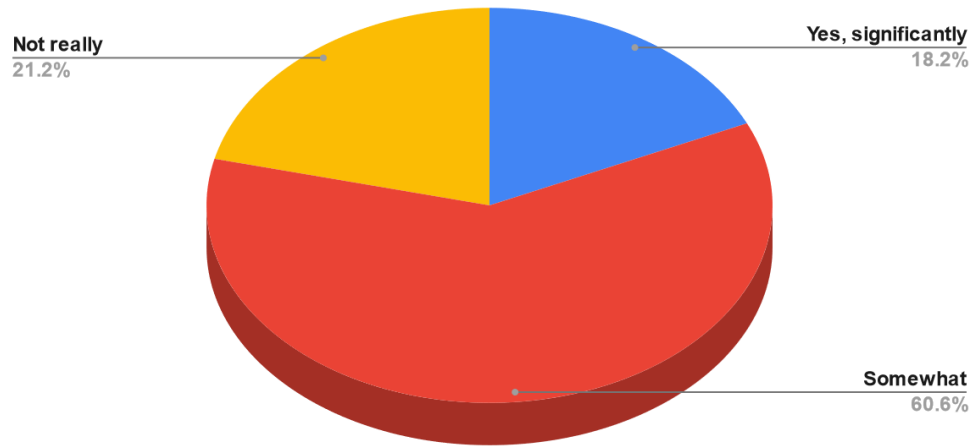
Figure 22: Students' Dependency on External Proofreading

Proofreading is known to be an important step in academic writing to improve the quality of a piece of work. We asked this question, aiming to see whether Grammarly has reduced students' reliance on others' proofreading. The majority of students **(60.6%)** indicated their reliance was **somewhat** reduced after using Grammarly. **21.2%** of students expressed that they did not experience much change (**not really**), indicating that external proofreading is essential. Only **18.2%** of the participants reported that the tool reduced their external dependency **significantly**. It is concluded that while Grammarly is a very helpful tool in academic writing, it cannot replace the importance of human proofreading.

Item 17: Do you feel more confident submitting paperwork after using Grammarly? Yes/ No, explain your answer.
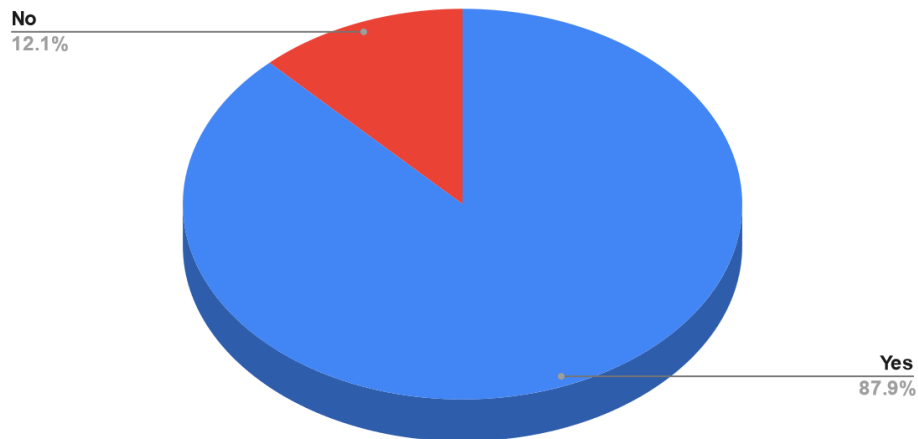
Figure 23: Grammarly's Impact on Students' Confidence

This item evaluates Grammarly's impact on students' confidence in submitting paperwork after using the tool. The figure reports that the majority of students **(87.9%)** answered with **yes,** indicating that Grammarly indeed made them submit paperwork confidently, while 12.1% responded with **no**. We asked the participants to further explain their answer, and their statements are as follows:

For "Yes":

- *"Grammarly helps finding the errors or mistakes in my work"*

- *"I'll trust the final products of Grammarly. It gives a well structured without errors or mistakes."*

- *"Let me feel confident, and my work is perfect"*

- *"because it simply gives a perfect change in the mistakes anyone did"*

- *"Because I think that paperwork contains correct writing"*

- *"I believe in my academic writing level, but sometimes I forget the grammar rules"*

- *"Because I am 90% sure, grammar and sentence structure are correct"*

- *"because Grammarly helps me catch grammar and spelling mistakes, which makes me feel more confident that my writing is clear and professional"*

- *"because i am sure that my mistakes are corrected"*

- *"to a high extent. I feel confident concerning my writing giving a paper with less mistakes gives a great possibility to get excellent scores."*

- *"I believe I trust grammarly's, proofreading to an extent that makes me confident of the final product"*

- *"When I submit my work after using Grammarly here, I know that my mistakes had corrected, so yes, I feel confident"*

- *"I feel more confident submitting paperwork afterward to using Grammarly because it will give the correct structure and the rice vocabulary to my sentences and forgot them if they are wrong and the right context"*

- *"grammarly is very effective application and it corrects all the grammar mistakes and it has a good reputation so I will be confident when I use it"*

- *"I think grammarly is designed to be free from committing mistakes so after checking my test through Grammarly I'll get confident that it is free from grammar mistakes"*

- *"I feel more confident submitting paperwork after using Grammarly because it helps me catch grammar"*

- *"I feel extremely confident after using it in my PaperWorks it made me become more aware of my grammar mistakes."*

- *"because with the right help, I can submit my paperwork in confidence and not the fear of making a lot of errors"*

- *"that makes me feel I did the perfect structure and grammar"*

- *"Sure Grammarly has an effective and accurate correction of the mistakes that is why I will be sure and confidence when submitting my paper work"*

- *"because I know that my work is revised well"*

For "No":

- *"No, sometimes makes mistakes iCan not trust"*

- *"No, not at all because no matter how the final paperwork going is going to be it is about the content and structure so using Grammarly is just a mean of checking"*

- *"No, because Oh, I didn't use it so much due to. I don't want to get used to it."*

- *"Somehow, we always need more check up for our work before any submission, even from external sources for people"*

Most students responded positively, highlighting that Grammarly boosts their trust in the quality of their piece of writing by detecting and correcting their grammatical errors and spelling mistakes, which reduces their fear of making errors. However, a minority has expressed a negative response highlighting the unreliability of Grammarly "sometimes makes mistakes", " *we always need more check up for our work before any submission, even from external sources for people"* or that the content quality is what makes them confidence about their work rather than grammar perfection "*it is about the content and structure ".*

Section Five: Challenges of Using Grammarly

Item 18: What are Grammarly's MAIN limitations?
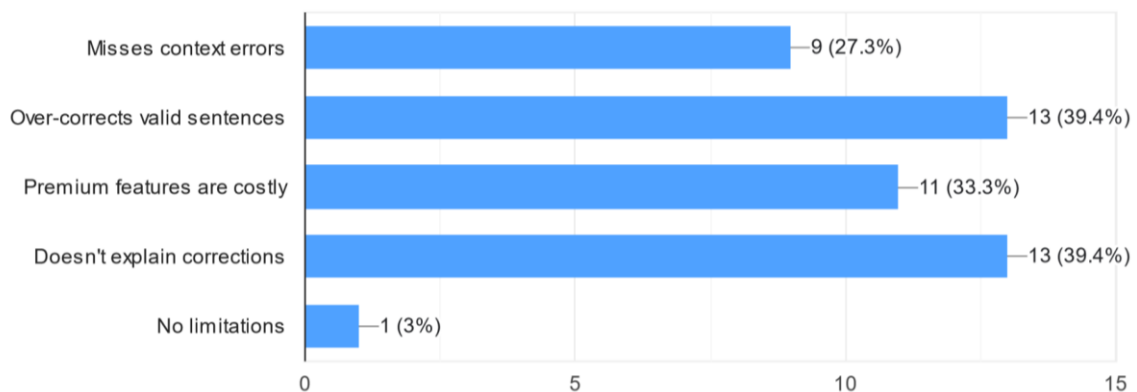
Figure 24: Grammarly's Main Limitations

Grammarly can have many limitations, hence, we wanted to ask students about the limitations they face when using this tool. The figure displays that 39.4% of the students' choice was that Grammarly's main limitation is that it overcorrects valid sentences. Also, 39.4% of

students reported that Grammarly does not explain corrections. Next to that, 33.3% of the respondents see the costly premium features of Grammarly as a limitation. Moreover, 27.3% of the students declared that Grammarly fails to detect context errors. Only one student reported that Grammarly has no limitations. To sum up, based on the statistics gathered, we notice that students' use of Grammarly is limited due to the tool's various limitations, which can affect students' trust in academic contexts.

Item 19: How often do you disagree with Grammarly's suggestions?
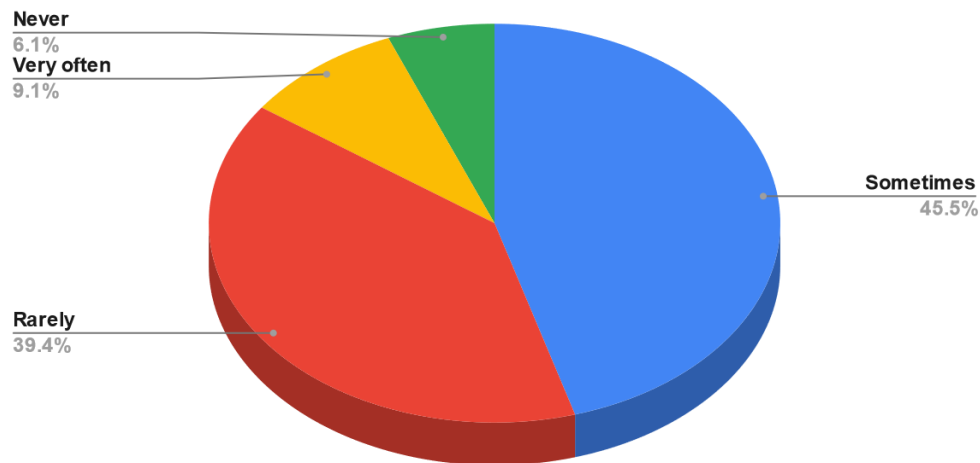
Figure 25: Grammarly's Suggestions Disagreement

This question is designed to understand how often students feel that Grammarly makes wrong or unnecessary suggestions. **45.5%** of the students said they **sometimes** disagree with Grammarly's suggestions, while **39.4%** said that the disagreement **rarely** happens. A minority of 9.1% reported that they **very often** disagree with the tool suggestion**,** meanwhile, only 6.1% said they **never** disagree. Based on these results, we conclude that while most students view Grammarly as a reliable and helpful tool, they also engage with its feedback critically rather than accepting all suggestions automatically.

Item 20: How often does Grammarly provide incorrect suggestions?
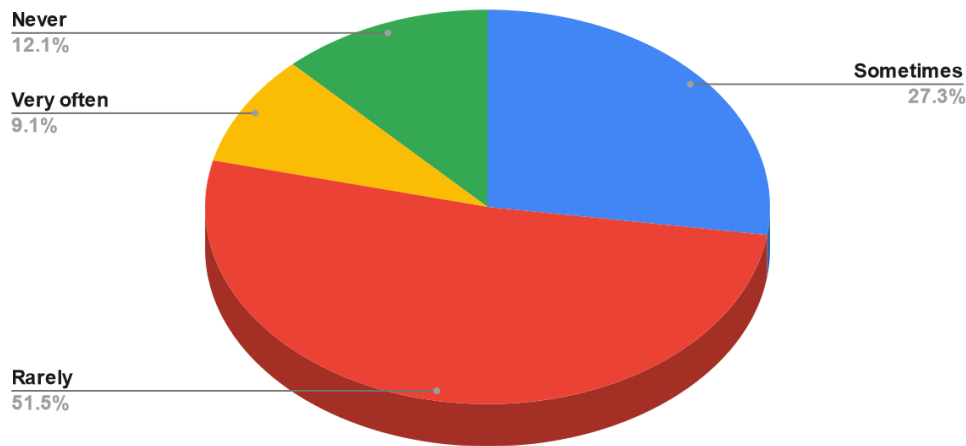
Figure 26: Grammarly's Incorrect Suggestions

The majority of students **(51.5%)** reported that Grammarly **rarely** provides incorrect suggestions, while **27.3%** of the students said that the tool **sometimes** does. A minor group **(12.1%)** noted that incorrect suggestions **never** occurred; however, some **(59.1%)** declared that Grammarly **very often** suggests incorrect suggestions. These results imply that while Grammarly is largely reliable for grammar support for many students, occasional inaccuracies still occur.

Item 21: Which types of errors does Grammarly FAIL to detect?
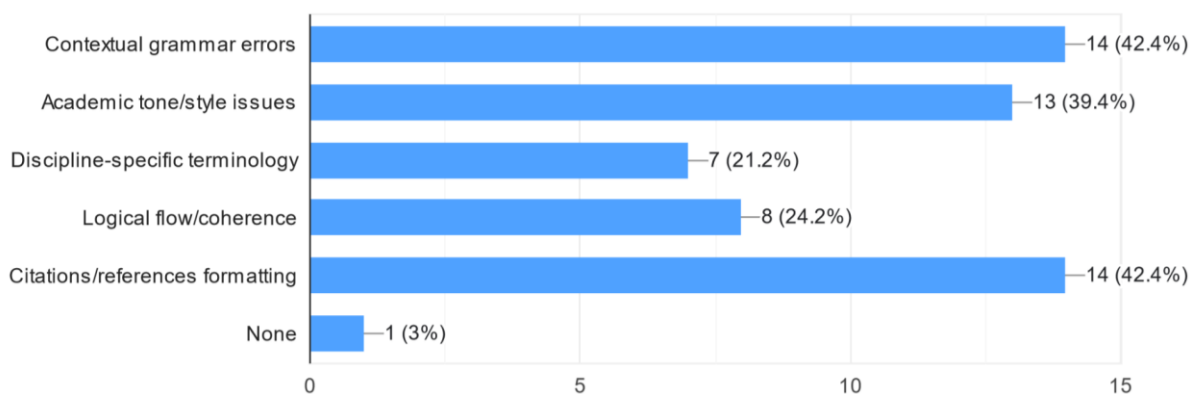
Figure 27: Errors Grammarly Fails to Detect

This item sought to shed light on the errors Grammarly fails to detect. The figure above demonstrates that **42.4%** of students stated that Grammarly fails to detect contextual grammar errors, and an equal percentage **(42.4%)** reports that the tool fails at **citation/reference formatting**. **Academic tone/ style issues** are represented as the 3rd most failed to detect error by Grammarly by **39.4%** of the students. Next to that, **24.2%** of the respondents declared that Grammarly fails to detect **logical flow/ coherence**, and **21.2%** said that it fails to **detect discipline-specific terminology**. However, only **3%** (1 respondent) claims **none** of the errors Grammarly fails to detect. Based on the students' feedback, Grammarly appears to be less effective in identifying many errors that require contextual understanding.

Item 22: Does Grammarly hinder your ability to develop a personal writing style?
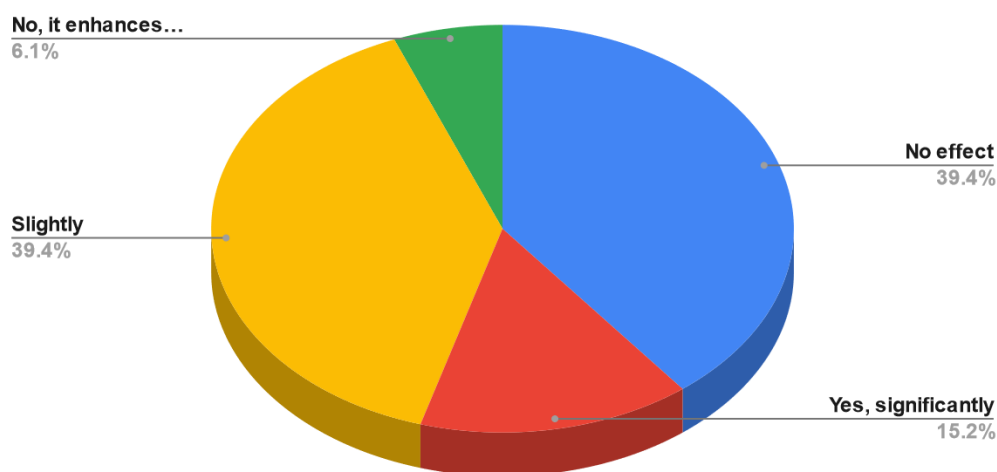
Figure 28: Grammarly's Interference with Students' Writing Style

The last item aims to evaluate whether students feel that Grammarly interferes with their style of writing development. The figure above displays mixed perceptions about Grammarly's impact on students' writing style. **39.4%** of students reported that Grammarly **slightly** hinders their writing style, and, similarly, **39.4%** of the students said that Grammarly

had **no effect** on their unique style. **15.2%** of the responders believe that the tool **significantly** hinders their writing style. On the other hand, only **6.1%** of the participants claimed that Grammarly, in fact, **enhances** their writing style. All in all, while some students do feel hindered by Grammarly, most of them do not see it as a serious barrier to developing a unique writing style. In fact, for a few, it supports their stylistic writing growth.

3.4. Teachers' Interview

3.4.1 Aim of Teachers' Interview

An interview in qualitative research seeks to provide a better understanding and explanation of perceptions, opinions, experiences, behaviors, and so on. We interviewed teachers to explore their perceptions and opinions on students' use of Grammarly and get a glance at what impact this tool has on students on students' writing skills.

3.4.2 Description of Teachers' Interview

In order to fulfill the research objectives and requirements, we interviewed (04) teachers of academic writing courses in the English division at the University of Biskra. The researcher used a structured interview that consists of a series of (05) open-ended questions that attempt to gain precise data from the teachers about Grammarly's impact on students' writing skills, considering their perceptions and opinions about the tool.

3.4.3 Administration of Teachers' Interview

The interview was specifically designed for teachers who teach/taught an academic writing course. The researcher was only able to interview four (04) teachers due to the difficulty to find academic available teachers of academic writing. The interview was not done face-to-

face but was sent as a copy via Gmail to the teachers' emails. Moreover, the interview was answered within a few days, and the teachers were very responsive.

3.4.4 Analysis of the Interview

In this section, the researcher uses a thematic analysis of the interview responses regarding students' use of Grammarly. Braun and Clarke (2006) define thematic analysis as a method of qualitative analysis that involves the identification, analysis, and reporting of themes and repeated patterns within qualitative data. In order to interpret the interview transcripts, the researcher generated codes and constructed themes relevant to answering the research questions. Moreover, the researcher reviewed and defined the themes to develop a detailed analysis of each one and produced the following report.

Theme 1: Familiarity with AI Tools:

Most teachers indicated familiarity with writing tools such as Grammarly, such as Quillbot, ProWritingAid, Hemingway, Editor, Ginger, Wordtune, Chatgpt, Deppseek, and others. This highlights a general awareness of the artificial tools that support writing. One teacher states: "These tools assist with grammar correction, paraphrasing, clarity, tone, and overall writing", indicating his full awareness and acknowledgement of their functions. However, only one teacher reported that he is not familiar with AI writing tools, which suggests uneven exposure to these tools among teachers and educators. This variation depicts different levels of engagement with AI tools in teaching practices.

Theme 2: Encouragement vs. Discouragement of Grammaly's Use:

Three teachers out of four expressed positive attitudes toward students' use of Grammarly in academic writing. They encourage the use of Grammarly, highlighting its value in helping students correct grammatical errors and improve the quality of their writing. they acknowledged the impact of Grammarly in boosting students' confidence in their writing. Moreover, they unanimously emphasized using it as a supplementary aiding tool rather than

fully relying on it. On the other hand, one teacher fully discouraged the use of Grammarly and any other AI tool, citing concerns over students' over-reliance on the tool and diminishing writing capacities. Teachers' support of the use of Grammarly was strictly framed by pedagogical balance. They emphasised that Grammarly should not take the place of critical thinking, human feedback, or traditional learning.

Theme 3: Impact of Grammarly on Grammar Learning

The improvement of EFL students' academic writing skills is critical to any academic writing teacher/course. Teachers agreed that Grammarly may assist students in recognising and minimising grammatical errors, particularly by reinforcing grammatical awareness and providing prompt feedback and explanations of corrections. They acknowledged that Grammarly helps students recognise patterns in their mistakes and build awareness of grammatical issues that impair their writing quality. One teacher stated that Grammarly can improve grammar learning only for expert learners who use Grammarly with attention to the explanations of corrections the tool makes. However, all teachers pointed out that Grammarly promotes surface-level correction and rarely supports a deep understanding of grammar rules, which potentially hinders grammatical

competence.

Theme 4: Grammarly Strengths and Failures in Practice

Teachers provided different real-life examples that demonstrated the effectiveness and limitations of Grammarly in academia. On one hand, it was credited that Grammarly reduced grammar errors, enhanced writing style, and improved clarity problems in students' work, particularly for minor mistakes like punctuation, tense, and article use. For example, a teacher reported a case where a student's essay was much improved by Grammarly's vocabulary recommendations. However, on the other hand, there were also clear observed limitations of Grammarly. The tool was criticized for occasionally overlooking problems with subject-verb

agreement, misunderstanding technical terms, wrongly identifying correct words as errors, and applying outdated grammatical norms (e.g. geneder gender-neutral "they"). Some teachers further added a point that the tool is not able to offer as helpful, constructive, personalised feedback as teachers do, which limits its instructional value.

Theme 5: Over-Reliance and Reduced Autonomy

The risk of over-reliance and passive learning was frequently mentioned by the teachers, where students blindly accept suggestions without grasping the underlying grammar principles. They observe that this reliance reduces students' motivation to revise independently or think critically about their writing, which leads to less engagement in the writing process. This will eventually impact students' autonomy and diminish their critical thinking and writing skills.

3.5 Discussion and Interpretation of Findings

This study aims to investigate the impact of Grammarly on improving students' writing skills. In order to obtain reliable information, the researcher used two research tools to collect the data: a questionnaire and an interview. The previous section has provided interesting data concerning the perceptions, opinions, and experiences of students with Grammarly at the English division. Additionally, this research work has also revealed interesting attitudes of teachers towards the use of Grammarly in academia. Therefore, the current section is dedicated to the discussion and interpretation of the findings.

3.5.1 Discussion of Students' Questionnaire

The purpose of the student questionnaire was to explore how learners perceive and use Grammarly as an AI writing tool in their academic writing journey. Explicitly, the analysis of the students' questionnaire responses reveals that Grammarly is widely regarded as a useful and supportive tool in academic writing, particularly in addressing grammatical issues. The majority of the students expressed that it helped improve their writing quality and boosted their

confidence when submitting academic assignments because of its capacity to identify and fix grammatical problems and improve the overall structure and clarity of their work.

Moreover, Grammarly got credited for making students more conscious of their frequent grammatical errors. This suggests that Grammarly can support the reinforcement of grammar knowledge when used carefully. Repeated use of the application was seen as beneficial in reinforcing grammar awareness, especially among those who paid attention to the corrections and explanations provided. Some students reported that Grammarly helped them internalise certain grammatical rules over time, particularly with issues like verb tense, subject-verb agreement, and article usage.

While some students said that Grammarly assisted them in internalising grammatical rules, Others admitted that they often rely on Grammarly passively. Many accept suggestions without reflecting on the reasoning behind them, which can hinder long-term learning and independent editing skills. Some students even acknowledged that they had become unduly reliant on the program, sometimes to the cost of learning grammar rules or developing their writing style. A few respondents also expressed frequent disagreements with Grammarly's suggestions, which raises a question about the accuracy of Grammarly. This demonstrates a gap in the learning outcomes according to the level of engagement with the tool's recommendations.

3.5.2 Discussion of Teachers' Interview

Teachers' interview responses revealed a range of perspectives on the use of Grammarly in academic writing. The majority encouraged the use of the tool, emphasising its usefulness in assisting students with grammar correction, vocabulary enhancement, and clarity of expression. They saw potential in Grammarly as a supportive tool that could improve students' awareness of language patterns and typical errors. Nonetheless, this encouragement

came with a strict condition that students should not use the tool as an alternative in their writing but rather as a supporting tool.

Teachers valued Grammarly's ability to offer immediate feedback and correct surface-level mistakes, which can enhance students' awareness of grammatical issues. Still, they also noted that without deliberate attention to the explanations provided by the tool, students are unlikely to internalise grammar rules or develop critical language awareness.

Undoubtedly, Grammarly, an AI writing tool, was criticised for its superficial learning approach, with teachers arguing that students often accept its suggestions without critical understanding, leading to superficial texts. Overuse can result in polished but impersonal writing, prioritising correctness over creativity. Grammarly is recognised for improving surface-level errors, but was criticised for offering incorrect suggestions or not accurately handling nuanced language. Teachers also expressed concerns about students' over-reliance on the tool and its impact on student autonomy and critical thinking skills, fearing that habitual dependence could hinder the development of students' own language and writing capacities. Despite these concerns, most teachers agreed that when used mindfully and in conjunction with traditional instruction, Grammarly can be a beneficial tool that supports students in refining their writing.

Conclusion

This last chapter covers the study's fieldwork in which the researcher employed two research methods to gather data: teacher interviews and student questionnaires. The questionnaire was administered to (33) master-one students at the English division at Mohamed Khider. Simultaneously, the interview was conducted with (4) academic writing teachers at the English division at Mohamed Khider University. It is essential to highlight that these research tools allowed the researcher to investigate the participants' attitudes, perceptions, and opinions on the use of Grammarly for academic writing. To conclude, the findings from both the

students' questionnaire and teachers' interviews have revealed a nuanced view of Grammarly as an AI writing tool. They both had positive attitudes towards its use in academic contexts, emphasising its usefulness in assisting students with writing. However, concerns were raised because the tool tended to promote superficial learning and passive reliance. Overall, the study findings meet the research objectives and answer the research questions.

General Conclusion

Advancements in technology, especially in artificial intelligence, have had far-reaching and visible impacts on educational practices in the last decade, with language learning being one of the most engaged fields. Multiple digital tools were developed during that time, but automated writing evaluation technologies (AWE), such as Grammarly and others, have been the most popular for supporting English as a Foreign Language (EFL) students in academic contexts.

The present study explored the role of Grammarly on correcting grammatical mistakes in the academic writing of Master One English students at Mohamed Khider University of Biskra. The purpose of this research was to investigate if Grammarly was effective in helping students improve grammatical accuracy, to determine the features that students used most frequently, to evaluate students' perceptions of what were the beneficial or limited experiences, and to identify teachers' perceptions of what were the positive or confined experiences.

The population for this research comprised all English Master One students and their teachers at Mohamed Khider University of Biskra. The sample consisted of 33 students and 4 teachers. Data were collected from a semi-structured questionnaire for students and through a structured interview for the teachers, incorporating both quantitative and qualitative perspectives. The data from the questionnaire were analyzed descriptively using Google Sheets and Microsoft Excel, and the interview responses were analyzed using thematic analysis.

"This study demonstrates that Grammarly significantly reduces grammatical errors in Master One EFL students' academic writing (RQ1), particularly for surface-level mistakes like verb tense and punctuation, though it struggles with context-dependent errors. Students most frequently utilized its grammar/spell-check features while underusing premium tools like plagiarism detection due to cost barriers (RQ2). While 87.5% of students reported improved confidence and proficiency, they critiqued its over-reliance potential and lack of rule

explanations - a concern echoed by teachers who noted its inability to replace human feedback (RQ3). Key challenges included dependency risks and limited contextual understanding (RQ4), suggesting Grammarly works best as a supplementary tool alongside traditional instruction."

In conclusion, this study shows that although Grammarly can provide support for improving grammatical accuracy and allowing learner autonomy while writing, the tool can potentially be more effective if used in conjunction with formal instruction and conscious engagement with language. The study adds to the understanding of integrating AI-enabled tools for EFL academic writing and provides useful information for educators and institutions looking to enhance their educational practices with technology.

Pedagogical Implications and Recommendations

The findings of this study highlight several important pedagogical implications for EFL instruction in academic writing, particularly in contexts where digital tools like Grammarly are increasingly integrated into the learning process.

- **Enhancing Learner Autonomy and Self-Editing Skills**

The results of this study suggest that the use of Grammarly in academic writing instruction may promote increased learner autonomy in EFL students. The immediate feedback provided by the tool allows students to identify their own grammatical mistakes and self-correct, which can develop their self-editing practices. This contributes to developing learner independence skills, which are a necessity for both academic and professional autonomy.

- **Balancing Technology with Explicit Instruction**

Although Grammarly provides a lot of services in identifying and fixing basic grammatical mistakes, the findings indicate that it should not replace direct grammar instruction and teaching from teachers. The software misses some advanced, and sometimes contextual, errors. Therefore, teachers should use Grammarly as a tool while maintaining that the basis of the writing curriculum continues to be explicit grammar instruction and teacher-supported feedback.

- **Developing Critical Digital Literacy**

The study emphasizes the critical role of digital literacy for students and educators. For instance, effectively using Grammarly requires users to think critically about the feedback provided and not simply accept or reject all of the suggestions uncritically. Additionally, institutions should provide sessions to assist students and educators develop the literacy skills to use AI tools mindfully and ethically.

- **Addressing Overreliance and Encouraging Critical Thinking**

A potential risk outlined in the research study was that students could become too reliant on Grammarly, resulting in a lack of understanding about the reasoning behind the

corrections to their original construction. As teachers, it is important to remind students that all feedback from Grammarly can present a learning opportunity. For example, when students receive unacceptable feedback from Grammarly, they can decide how or why Grammarly gave them the error. This will begin to develop critical thinking and greater awareness of the language.

Recommendations for future research

Developing academic studies that go beyond short-term interventions will help researchers explore the enduring effects of Grammarly and similar AI tools in writing through longitudinal investigations. Researchers who monitor EFL students throughout multiple semesters or academic years will determine how well students maintain their written accuracy and freedom after prolonged exposure to the tool and how their feedback preferences transform over time. A study of this nature could determine the extent to which students use Grammarly-acquired skills in their writing across different professional and academic contexts.

The exploration of integrating Grammarly into collaborative writing processes and process-oriented writing instruction represents a promising developmental area. Research opportunities exist to analyze how Grammarly's feedback features operate during student interactions in peer reviews and group projects, and multiple drafts. Research on how automated feedback systems interact with human feedback from both peers and instructors could produce valuable knowledge about effective approaches to combine technology with social learning that leads to enhanced grammatical comprehension and critical thinking skills.

The next wave of research needs to analyze AI tool usage from three perspectives, which include linguistics and cognitive, and emotional aspects. Researchers should explore the mediating effects of digital literacy and learner motivation, and self-efficacy on the effectiveness of Grammarly in diverse EFL contexts. Further research should examine the

effects of Grammarly through comparative studies with other AI writing assistants and analysis of its influence on advanced writing skills such as argumentation, coherence, and academic voice in language education. Through such research, we can discover best practices for AI tool implementation in both curriculum planning and teacher development, which will enable technology to enhance meaningful and equitable language learning experiences.

Limitations of the study

This study presents valuable insights about Grammarly's impact on error reduction for Master One EFL students at Mohamed Khider University of Biskra, yet researchers must recognize certain limitations that affect the results and shape further investigation.

First, the study used a sample group that consisted of 33 students and 4 teachers from one university, thus demonstrating limited size and diversity. The small number of study participants prevents researchers from extending their findings beyond this specific university and EFL contexts in Algeria and other regions. The study may not properly capture the complete range of EFL students and instructors because these groups vary in their digital literacy skills as well as their technology access and attitudes toward AI writing tools.

Second, the research extensively used information gathered from self-reports obtained through surveys and face-to-face interviews. The research employed questionnaires and interview methods, which produced valuable qualitative and quantitative data, although self-reported information faces social desirability and memory selectivity, and question comprehension issues. The outcome of the data collection process sometimes fails to precisely demonstrate participants' genuine behaviors and attitudes, along with their Grammarly usage skills.

Third, the analysis examined the immediate and subjective consequences of Grammarly utilization in academic writing among students as its primary research objective. The study

avoided using longitudinal methods to observe prolonged Grammarly effects and to verify changes in student grammar through before-after writing assessments. The study did not determine whether observed grammar improvements and increased student independence lasted over time or how students' automated feedback dependency changed with extended experience.

Fourth, the study failed to include a control group or test Grammarly against other automated writing evaluation systems and conventional teacher feedback methods. The absence of these research elements creates challenges in determining whether observed changes result from Grammarly use or how it stands against alternative teaching methods. The research failed to perform a systematic evaluation of how Grammarly usage in teaching contexts and teacher development affects outcomes. Moreover, the study did not analyze the combined effects of automated feedback and human responses.

Finally, the study did not examine multiple critical aspects, including students' and teachers' previous digital tool experience, their digital literacy level and Gradey premium feature access, and the institutional support, together with training opportunities available. These unexamined factors play a major role in determining how Grammarly is adopted for educational purposes, and their exclusion forms a research gap in current literature.

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Appendices

Appendix A

Mohamed Khider University – Biskra

Department of Literature and Languages English Department

Students' Questionnaire on the Influence of Grammarly on Reducing Grammatical Errors in Academic Writing

Dear Student,

You are kindly invited to participate in this questionnaire, which is part of a research study on the influence of Grammarly on reducing grammatical errors in academic writing among Master students of English. The aim of this questionnaire is to gather your honest opinions and experiences regarding the use of Grammarly in your academic writing. Your responses will remain confidential and will be used solely for academic research purposes. Please answer all questions as accurately as possible.

Thank you very much for your time and valuable contribution.

Section One: Demographic Information

This section collects basic information about your background.

1. **What is your gender? ***

Mark only one oval.

☐ Female

☐ Male

2. How would you rate your Grammar proficiency level? *

Mark only one oval.

☐ High level

☐ Medium level

☐ Low level

3. For how long have you been using grammarly?

……………………………………………………………………………………..

Section Two: Usage of Grammarly

This section asks about your experience using Grammarly during the study.

4. How often do you use grammarly in academic writing? *

Mark only one oval.

☐ Always

☐ Often

☐ Sometimes

☐ Rarely

☐ Never

5. Which version of grammarly do you use? *

Mark only one oval.

☐ Free version

☐ Premium version

6. Where do you typically use Grammarly? *(Select all that apply)* *

Check all that apply.

☐ On university computers

☐ On personal laptop

☐ On mobile devices

☐ On Emails

☐ Other**:**

_____

7. When do you use grammarly? *

Mark only one oval.

☐ During the writing process

☐ After drafting

☐ Both

Section Three: Perceptions of Grammarly's Effectiveness

This section evaluates your views on Grammarly's impact.

8. How effective is Grammarly at detecting grammar errors? *

Mark only one oval.

☐ Extremely effective

☐ Moderately effective

☐ Slightly effective

☐ Ineffective

9.   What type of grammatical errors does Grammarly help detect the most? *

Check all that apply.

☐ Verb tense

☐ Subject-verb agreement

☐ Articles (a/an/the)

☐ Prepositions

☐ Word order

☐ Punctuation

☐ Spelling

10.   After using grammarly, how often do you seek additional grammar check/help? *

Mark only one oval.

☐ Always

☐ Often

☐ Sometimes

☐ Rarely

☐ Never

11.   To what extent did Grammarly help improve your ability to identify grammatical *

errors independently?

Mark only one oval.

☐ To a great extent

☐ Somewhat

☐ Very little

☐ Not at all

12. Has using Grammarly improved your grammar proficiency over time? yes/ no,   *

explain your answer.

_____

_____

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13. Do you think Grammarly helps you learn grammar rules or simply corrects your   *

mistakes for you? Please explain.

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Section Four: Writing Improvement

This section assesses how Grammarly has contributed to enhancing specific aspects of your

academic writing skills.

14. Has Grammarly improved your academic writing skill? *

Mark only one oval.

☐ Significantly improved

☐ Slightly improved

☐ No change

15. Which writing skills improved MOST with Grammarly? *

Check all that apply.

☐ Grammar accuracy

☐ Vocabulary range

☐ Sentence structure

☐ Punctuation

☐ Academic style

☐ Clarity

16. Has Grammarly helped you reduce your dependency on external proofreading (e.g., *

from peers, teachers, or editors)?

Mark only one oval.

☐ Yes, significantly

☐ Somewhat

☐ Not really

☐ Not at all

17. **Do you feel more confident submitting paperwork after using Grammarly? yes/ no,**

       *

explain your answer.

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Section Five: Challenges of Using Grammarly

This section identifies potential issues with Grammarly.

18. **What are Grammarly's MAIN limitations?** *(Select all that apply)* *

Check all that apply.

☐ Misses context errors

☐ Over-corrects valid sentences

☐ Premium features are costly

☐ Doesn't explain corrections

☐ No limitations

19. **How often do you disagree with Grammarly's suggestions? ***

Mark only one oval.

☐ Very often

☐ Sometimes

☐ Rarely

☐ Never

20. How often does Grammarly provide incorrect suggestions? *

Mark only one oval.

☐ Very often

☐ Sometimes

☐ Rarely

☐ Never

21. Which types of errors does Grammarly FAIL to detect? *(Select top 3) ***

Check all that apply.

☐ Contextual grammar errors

☐ Academic tone/style issues

☐ Discipline-specific terminology

☐ Logical flow/coherence

☐ Citations/references formatting

☐ None

22. Does Grammarly hinder your ability to develop a personal writing style? *

Mark only one oval.

☐ Yes, significantly

☐ Slightly

☐ No effect

☐ No, it enhances my style

Appendix B

Mohamed Khider University – Biskra

Department of Literature and Languages English Department

Teacher's Interview

Dear Teachers,

Thank you for participating in this interview, which explores the role of AI tools like Grammarly in academic writing. Your insights will shape a master's dissertation titled *"An Exploration of Grammarly's Influence on Reducing Grammatical Errors in Academic Writing."* The questions will address your experiences, observations, and recommendations regarding students' use of this technology. All responses will remain confidential and anonymized. Your expertise is invaluable to understanding how Grammarly impacts learning and writing practices. We deeply appreciate your time and honesty.

1. **Are you familiar with AI writing tools like Grammarly? Could you list some of them? ***

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2. **Do you encourage or discourage students' use of Grammarly in their Academic Writing? Why or why not? ***

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3. **Do you think Grammarly helps students learn grammatical rules and reduce grammatical errors? ***

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4. **Could you share specific instances where Grammarly improved—or failed to address—students' writing?**

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5. **What limitations have you observed in students' reliance on Grammarly?**

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THE ROLE OF GRAMMARLY IN REDUCING EFL STUDENTS' GRAMMATICAL ERRORS

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Résumé

Ce mémoire étudie l'impact de l'outil numérique Grammarly sur la réduction des erreurs grammaticales dans les productions académiques écrites des étudiants de Master 1 anglais à l'Université Mohamed Khider de Biskra. L'objectif principal est d'évaluer dans quelle mesure l'utilisation de Grammarly peut améliorer la précision grammaticale et soutenir le développement des compétences rédactionnelles en contexte EFL (English as a Foreign Language). Pour ce faire, une méthodologie qualitative a été adoptée, combinant un questionnaire imprimé remis aux étudiants et un entretien structuré envoyé en ligne aux enseignants. Les résultats montrent que Grammarly aide la majorité des étudiants à identifier et corriger leurs erreurs, favorisant ainsi une plus grande autonomie et une meilleure confiance dans l'écriture. Toutefois, certaines limites ont été relevées, notamment une dépendance excessive à l'outil et des suggestions parfois inadaptées au contexte académique. L'étude recommande d'intégrer Grammarly comme un soutien complémentaire à l'enseignement traditionnel, tout en encourageant une utilisation critique et réfléchie des outils d'intelligence artificielle dans l'apprentissage de l'écriture académique. Ce travail met en lumière les potentialités et les défis liés à l'intégration des technologies numériques dans l'enseignement supérieur en Algérie.

Mots-clés : Ecriture académique, erreurs grammaticales, Grammarly.