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Faculty of Letters and Languages

Department of English Language

**Analysing the Use of Grammar-Checking Tools in  
Dissertation Writing:  
The case of Master 2 Students at BBA University**

Dissertation Submitted to the Department of English Language in Fulfillment of  
the Requirements of a Master's Degree in Didactics

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## **ABSTRACT**

The increasing prevalence of AI-driven grammar-checking tools has garnered significant attention in educational contexts, particularly regarding their potential effects on students' autonomy and skill development. Concerns have been raised about the implications of these tools on students' independent learning and proficiency. This study investigates the extent to which frequency of use, preferred features, types of errors corrected, motivating factors, and teacher perceptions predict students' adoption of grammar-checking tools in dissertation writing. A quantitative approach was adopted; survey questioners were used as instrument to collect the data from students and teachers. The target samples were 100 master 2 students, and 15 EFL teachers from the English Department at Mohamed El-Bachir El-Ibrahimi University. The collected data was statistically analyzed using the statistical software "Microsoft Excel" and "SPSS Software". The findings revealed that students use AI grammar checking tools most of the times to correct grammar errors in their writing. Students were motivated by immediate feedback, detailed errors explanation, AI time efficiency, and confidence in their writing. Grammarly, and Quilbot were the most familiar and the most commonly used tools by students and teachers. For students, these tools have a positive impact on their writing. However, most teachers agreed that students may become over-reliant on these AI grammar checking tools in their writing including dissertation writing. This over-reliance can lead to a low progress on student's critical thinking abilities, and on their editing writing skills. A balanced approach is suggested; a guided use of these tools without an over-reliance can lead to a noticeable improvement in students writing skills.

**Keywords:** Academic writing, Grammarly, EFL learners, AI grammar checking tools, Over-reliance, Critical thinking.

# Dedication

بسم الله الرحمن الرحيم والصلاة والسلام على أشرف المرسلين  
أما بعد

Thanks to Allah, who gives me the power and endurance to accomplish this dissertation work

I dedicate my dissertation work to my parents and my sisters. Thank you to my amazing mother, my inspiration, strength, and biggest supporter in my studies. I am so grateful for your love and belief in me. To my dear father, thank you for always encouraging and motivating me. I am so proud to have you both as my parents. I would like to thank my sister and her daughter who were by my side every time may Allah bless them and protect them all.

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Last but not least

I want to thank me

For believing in me

I want thank me for doing all this hard work

I want thank me for having no days off

I want to thank me for never quitting

I want to thank me for always being a giver

And trying to give more than I receive

I want to thank me for trying to do more right than wrong

I want to thank me for just being me at all times.

**HASSANI SALAH ADDINE**

# Dedication

بسم الله الرحمن الرحيم والصلاة والسلام على أشرف المرسلين  
أما بعد

I would give special thanks, gratitude to my family, especially my mother, and my father. You were always with me, and for me. You gave me the strength, and woke my fire up to unlimited my dreams, well this success is for you, and only you. I wanted you to know that I made it for you. I would thanks my friend Salah as well, he was a good friend and a good partner, we supported each other, and this work could not be done without him. I would also thanks my supervisor D.R Mohamed a laoubi , M.R nezzar , and all teachers for their kindness, advice, and time. A special thanks to my brother, sister for their encouragement. also I thanks my childhood friend bilel , and to all my friends , idir , wail , redha , and to all my classmate .

**GASMI ISSAM**

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Specific and special gratitude is reserved for all the teachers and students who willingly participated and rendered their useful feedbacks and opinions.

## **List of Acronyms and Abbreviations**

**AI:** Artificial Intelligence

**AIED:** Artificial Intelligence in Education

**App:** Application

**AW:** Academic Writing

**AWP:** Academic Writing Process

**BBA:** Bordj Bou Arreridj

**CF:** Corrective Feedback

**EA:** Educational Applications

**EFL:** English Foreign Language

**ESL:** English as a Second Language

**ICT:** Information and Communication Technologies

**GA:** Grammarly Application

**L2:** Second language

**Q:** Question

**SC -** Self-Correction

**SF -** Self-Feedback

**SLA:** Second Language Acquisition

**WP:** The Writing Process

**%:** Percentage

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# **General Introduction**

# 1. Background of the study

Information and communication technologies (ICTs) have had a significant impact on the educational field, particularly in foreign language learning, which involves mastering the four language skills: speaking, reading, listening, and writing. Writing skills in general and academic writing specifically is a skill for students, teachers, researchers and academician. Writing in English unlike speaking, listening, and reading is rarely practiced outside the classroom, so what is learned inside the class is practiced inside and has a little opportunity to be developed outside. At first sight, the writing skill seems as an easy task for most EFL learners and it does not need much effort to produce a sophisticated language. Yet, when it comes to expressing their thoughts, interpreting their emotions, and conveying their opinions in a structured written form, they become confused as to where to start writing. One of the most important components of higher education is being able to write critically, logically, and in reliable form of Meroua Aziz & Noudjoud Hassani (2024). Having a good level of writing skills is crucial for English as Foreign language students for their future research, careers, and undergraduate periods. However, EFL students are facing many challenges and difficulties when it comes to the writing process BOUIGHA Khalid & NAMOUS Anis (2024) The complexity of skill has led the majority of students to struggle when they need to write paragraphs, which will result in poor writing. Moreover, English as Foreign Language (EFL) students' difficulties in mastering academic writing are often caused by a lack of feedback, practice, and traditional approaches to teaching academic writing. Nowadays, with the development of technology and with the appearance of Artificial Intelligence they developed many techniques and tools to enhance writing skill. The influence of AI has touched the field of English as a foreign language, in which AI has developed many writing checker tools to reduce difficulties and challenges during the AW process. Therefore, grammar-checking tools is one of the main techniques used to facilitate and improve writing. It refers to any online platforms for correcting, paraphrasing, proofreading and editing it can be free as it can be paid for or maybe has both options in order to achieve better outcomes. Among these tools, there exists Grammarly, QuillBot and other grammar checker tools, which is the subject of this research that aims to investigate and analyse the use of grammar checker tools in writing dissertation between master two students of English at BBA University to enhance their quality of writing in dissertation.

## **2. Statement of the problem**

In the modern world, a vast majority of learners have access to the internet due to the significant development of technology and with the emergence of Artificial intelligence and their incorporating in the education field many programs and applications have been developed to help learners achieve a better understanding to the academic writing concepts. the majority of EFL learners, using applications has become a necessity and an inevitability because they offer facilities and assistance for their writing process, including grammar checking, spelling, and punctuation due to the fact that Higher education requires a good level of academic writing proficiency. Writing skills has proved to be a complex skill in EFL teaching and learning due to the obstacles that learners face in the process of accomplishing their assignments or studies such as essays, articles, research papers and dissertations. These obstacles include grammar mistakes, punctuation, misspelling, and others. Therefore, this study will investigate to what extent do frequency of use, preferred features, types of errors corrected, motivating factors, and teacher perceptions predict students' adoption and effectiveness of grammar-checking tools in dissertation writing?

## **3. Research questions**

- To what extent are students willing to use grammar-checking tools in their dissertation?
- What specific features of grammar checking tools do students use the most?
- What types of errors are students correcting using grammar-checking tools?
- What factors encourage learners to use grammar-checking tools?
- How do teachers perceive the impact of Grammar checking tools on student's writing skills?

## **4. Research objectives**

- To assess the extent to which students are willing to use grammar checking tools when writing their dissertation.
- To identify the specific features of grammar checking tools that are most utilized by students.
- To identify and classify the most repeated errors that students make in their writing
- To explore the factors that encourage students to use grammar checker tools on writing their dissertation
- To examine teacher's perception of the impact of Grammar checking tools on student's writing skills, in terms of grammar proficiency and critical thinking.

## **5. Significance of research**

AI tools can be used as an indicator of student's weaknesses. By highlighting areas that need improvements such as (grammar, spelling ... etc.). Nowadays it is essential for teachers to ask: what kind of AI tools are students using the most and why? Do students rely on AI tools as a crutch or as a learning aid? What common errors do students commit in their writing? What motivate them to use these tools? ...etc.

Teachers can use online survey, or a discussion with students at the beginning of the academic year to answer the previous questions. The results allow teachers to design lessons that aims to improve learner's weaknesses or at least reduce them. Teacher must do his/her best to ensure that the lessons are tailored to overcome the challenges that students face, and foster their academic success. However, it may be beneficial for autonomous students that likes self-directed learning, to use these AI grammar-checking tools as a bridge to develop their writing skills, by identifying their repeated errors. EFL students must use these tools appropriately. It is not about just correcting the error, instead it is about understanding them and learn from it. Teachers can play a significance role in teaching students the correct use of these AI tools, to avoid the unwanted drawbacks.

Therefore, the findings of this study contributes to the field of education by shedding light on identifying the most common AI grammar checker tools used, the desired features , repeated errors the benefits and drawbacks of using these tools on students ,and seek teachers perspectives .

## **6. An overview of the methodology**

Guided by the positivism paradigm, this study is designed as a quantitative study, aiming to analyse the use of grammar checking tools in writing dissertation. Hence, a descriptive research is applied in our research. To achieve the objectives behind this study, a questionnaire (online) was employed as an instrument for data collection. This study involved 16 teachers and 100 students out of 135. A questionnaire of 27 questions was administrated to master two students of English at Department of Foreign Languages, Mohamed El Bachir El Ibrahimi University of Bordj Bou Arreridj, and another questionnaire of 11 questions was designed for teachers in the same university. For the sampling technique, this study adopts convenience sampling with teachers and random sampling with students to accomplish the objectives of this research. The data gathered from the questionnaires were analyzed using the statistical software "Microsoft Excel" .The findings of data gathering are analysed and evaluated in order to answer the

research questions. Data was analyzed statistically and demonstrated through tables and graphs, which are then presented in tables showing numbers and percentages. The study follows ethical guidelines, providing participants with detailed information, ensuring informed consent, maintaining confidentiality through numerical codes, and ensuring participant protection through secure data collection.

## 7. Definition of key terms

- **Writing skills:** the ability to communicate clearly and effectively using the written word it involves things like grammar, vocabulary, and organizing thoughts logically.
- **Academic writing:** a formal writing based on its standards, and characteristics to produce academic publications such as thesis, research, articles, reports, etc.
- **Dissertation:** a long piece of academic writing on a specific topic.
- **Information communication technology (ICT):** refers to the integration of technological tools and systems such as computers, networks, software, and telecommunications to create, store, process, transmit, and manage information.
- **Self-correction:** the process of identifying and correcting one's own errors or mistakes, often without external guidance.
- **Artificial intelligence:** or AI refers to the simulation of human intelligence in machines that are programmed to think and act like humans.
- **Grammar checker tools:** digital software applications or AI-powered programs designed to analyse written text for grammatical, syntactic, punctuation, and stylistic errors. These tools provide automated suggestions for corrections, helping users improve the accuracy, clarity, and coherence of their writing.

## **8. Organization of the dissertation**

The current dissertation will be consisted of a general introduction, three chapters, and a general conclusion.

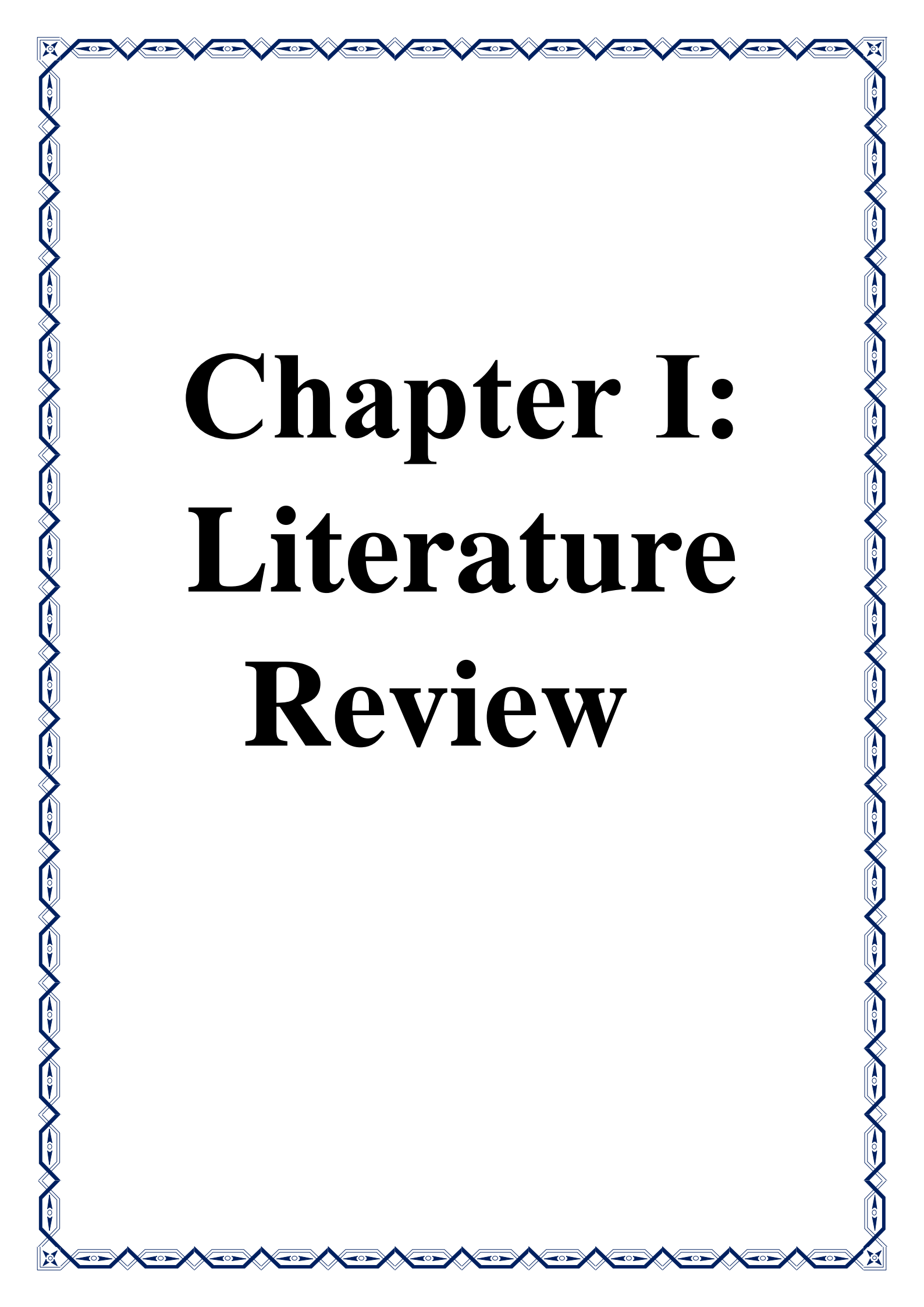
The general introduction constitutes of some background information related to the research, statement of the problem, research questions, objectives of the study, and the significance.

The first chapter contain the theoretical part of this research; it deals with four sections. The first section focus on presenting the core principles of academic writing, such us skills, components, types, process, and characteristics, as well as the difficulties that EFL students face in writing coherent and free from grammatical errors. The next section explain the role that Information and Communication Technology plays in language learning, precisely in enhancing writing abilities. Following this, the last section explain techniques that used in self-correction and the contribution of AI tools in improving independent study. Following this, the last section explain techniques that used in self-correction and the contribution of AI tools in improving independent study.

The second chapter is the core of the dissertation, which covers the practical aspect of the study and serves as the main body; it discusses the methodology of the research, including research approach, paradigm, and design. In addition to the research settings. Moreover, this chapter introduces the research questions and the population/sample chosen and why it was chosen and describes all the instruments and strategies employed in the study. The study limitations, delimitations, and ethical considerations are also discussed along with the data collection procedures and analysis.

The last chapter is one of the most important parts of this research; chapter three will provide the presentation and interpretation of the data collected from teachers and students questionnaire, which will be presented in quantitative method and compare the findings with the existing literature. This part will give some recommendations and suggestions for further research and the conclusion.

Finally, the dissertation concludes with a broad summary of the study, including a recap of the methodology and results, and formal answers to the primary research questions.



# **Chapter I: Literature Review**

## **Introduction**

The use of AI in education has revolutionized academic writing methods, especially for EFL learners. AI grammar checker tools have become crucial assistants, as they aid students in improving accuracy and clarity in their writing. However, despite the advantages, these tools can hinder students' skills as well. Considering that this topic may not be fully covered in our university, we (the authors) tend to raise awareness of these tools, from their efficacy and difficulties to their implication in this research paper.

There are four sections in this review. The first section discusses academic writing skills, components, characteristics, process, types, and challenges that EFL students face in creating properly organized and grammatically correct texts. The second section investigates the role of Information and Communication Technology language learning, particularly in enhancing writing proficiency. The third section focuses on AI grammar checker tools, analyzing their features, effectiveness, and their impact on students' writing progress. Lastly, we shed light on self-correction strategies, and how AI tools can contribute to students' autonomous learning.

Therefore, in this review we seek to address common problems, solutions, and provide a clear insight into how AI grammar checkers can influence EFL dissertation writing. Synthesizing existing researches may be beneficial for both students and educators regarding the pedagogical implications of these tools, leading to a better use of these AI tools while teaching writing.

# 1. Section One: Writing skill

## 1.1 Definition of Writing

Writing is an important aspect of language acquisition, and considered as one of the four fundamental skill alongside with listening, reading, and speaking. However, Scholars have not reached a particular description about its nature yet ., Among these skills, writing is often viewed as one of the most challenging skill for learners to master , even in higher education , and academic settings . As it cited in Algeria study by (Bouigha & Namous, 2024, p. 19).

According to Sa'adah (2020), writing is a fundamental ability in learning and linguistic competence, including diverse elements such as lexical choice, coherence, and linguistic structure. In addition, writing skill is a complex capability critical for clear expression, entailing the capacity to articulate ideas logically and lucidly through written language. It is acknowledged as one of the four core language skills, often considered the most challenging due to its requirements on a solid comprehension of syntax, punctuation, and vocabulary, combined with originality and critical thinking (Gautam, 2019; priyadarshu, 2022).

Scholars have explored writing, and approached it as a multifaceted skill that demands not just the articulation of letters, but also ideas, emotions, points of view through written expression, which shows the importance of learning it.

Buulolo et al. (2024) emphasize that writing functions as an essential medium of formulating language and conveying concepts, emotions, and perspectives across different contexts. It converts ideas into organized written forms, facilitating productive interaction with others. Similarly, writing permits engagement and knowledge sharing without direct interaction by facilitating communication across writers and readers (Hyland & Jiang, 2023). Likewise, writing works as an important tool for individuals to communicate and share thoughts without requiring direct interaction, enabling information exchange through different contexts and cultures. Over time, writing has developed from ancient forms to current digital expressions, adjusting to societal needs while persisting a favored method of communication (LaSalle, 2024).

Moreover, writing is not just limited to sharing ideas, opinions, and experiences; it is also a way to learn. And more than that, it can serve as a tool to gain self-understanding, as it enables the writer to think deeply and refine his/her ideas about something. According to Leon (2023) and Chauhan (2022), writing is a complicated system that involves convening concepts, exchanging information, and interacting efficiently. In addition, Kortmann spotlights that language plays the role of an instrument for articulating ideas and feelings, proposing that awareness with its framework is crucial for successful interaction (Kortmann, 2020). From the perspective of Gabriella et al. (2023), writing performs a number of objectives, involving self-expression, convincing, sharing of knowledge, and literary production, as showcased by various scholarly viewpoints. According to Aristotle's philosophy, language serves five essential purposes, with a focus on efficiently communicating ideas, convincing audiences, and exchanging information.

Additionally, Morin et al. (2018) and other researchers centered on the function of writing as means of communication that facilitate delivering information. Writing is a primary tool for communication, using text to convey messages regardless of distance or era. Its structural components of writing include the logical organization of symbols to construct clear terms, and phrases which is critical for productive interaction. Writing systems are composed of multiple elements such as graphemic units, including graphemes and allographs, and graphetic units like letters and graphs, which are organized into larger structures such as graphemic syllables (Hartmann & Szczepaniak, 2023). Writing serves as a crucial tool for transmitting knowledge through varied contexts, containing academic, professional, and educational settings. In academic environments, writing abilities are necessary for effective communication and exchanging knowledge (Leon, 2023). However, Writing entails multifaceted cognitive and physical operations that shape human engagement and development. (Singh & Jasuja, 2022).

EFL learners often perceive writing as the hardest skill to acquire, in contrast to the other three skills, as it requires some specific sub-skills. Turning ideas into writing is widely regarded as the most challenging of the four language skills (Chang et al., 2021), with many EFL students perceiving it as the most difficult. Effective writing demands specific skills to transform thoughts into well-organized and meaningful language.

According to Lo Sardo et al. (2023), and Altun (2023) riting is a complex, non-linear operation that requires significant time and mental effort. Writing is indeed a systematized process that incorporate several phases, primarily planning, drafting, reviewing, and revising these are essential for achieving efficient written communication. Research indicates that these phases help students improve their writing abilities, particularly in academic contexts where clarity and organization are crucial (Chauhan, 2022; Muamaroh et al., 2020). Therefore, writing is an essential skill that EFL learners should acquire, as it is a form of verbal communication. It helps both the writer to deepen his /her understanding of his / her ideas and share thoughts/experiences with others, while readers can learn from it. To understand the written form, the reader must be familiar with the language itself. Lastly, writing is a complex process that involves moving from one-step to another to produce well-developed and meaningful content.

## **1.2 The Writing Process**

Writing is a complicated challenge that the learners cannot achieve at a particular time. The writer starts to get involved in the writing process when they begin to express or write down their reflections and thoughts on the page. According to Baissa (2020), writing as a system revolves around a chain of stages that writers have to undertake until completing the final paper. To create a successful writing work, learners are required to follow a set of phases. Writing as a process is a productive system to improve learners writing skills, especially in academic and professional contexts. This process includes several steps, including pre-writing, drafting, revising, and editing (Suprpto et al., 2022).

### **1.2.1 Prewriting**

Pre-writing is a significant step in the writing process, and it includes anything that a writer does before writing the primary version of their written work. According to Lu et al. (2018), prewriting is described as the first step of writing where thoughts are produced and arranged.

Similarly, in the article of Mohammed et al., (2023), prewriting is described as a set of strategies that contain any actions or procedures that occur before completing the final version. It covers thinking, taking notes, discussing, free writing, organizing, and collecting information.

### **1.2.2 Writing the First Draft**

During the drafting stage, students engage to start writing. In this stage, the essential thing is to transfer ideas into text. Learners should not worry about spelling, grammar, punctuation or the most appropriate phrasing. Based on Doubtfire (2020), in the drafting phase, writers prioritize on expressing their ideas without the pressure of perfection, which encourages creativity and ideas development. Drafting serves as a strategy that enables students to investigate, build connections, and revise their thinking. When students have completed drafting, they must move to the revising stage.

### **1.2.3 Revising**

The third stage of the writing process is revising which is the key for creating effective documents. In this step, learners must read and reread what they wrote and review it by checking errors, word order and organization. According to Mazgutova (2020), revision forms a fundamental part of the writing process that incorporates text interpretation, reflection, and creation. In the same context, the revising level in the writing process is an essential step where writers improve their rough copies to boost readability, consistency, and overall quality. This stage includes various techniques, such as proofreading and mistake detection, which are necessary for enhancing text production and dealing with organizational and content-related problems (Goldman et al., 2023; Resmini et al., 2024).

### **1.2.4 Editing and Proofreading**

The fourth stage represents editing and proofreading. During this step, the writers check their drafts for cohesion and coherence and rewrite what they believe is unclear or ambiguous to form a clear passage. Editing involves refining content, flow, and language to enhance quality, while proofreading corrects errors like spelling, grammar, punctuation, and formatting to ensure a polished document.

According to Suprpto et al. (2022) and Resmini et al. (2024), the editing stage in the writing process is an important stage that involves improving the text to strengthen clearness, logical flow, and overall quality. This stage comes after drafting and includes activities such as proofreading, fixing grammatical mistakes, and verifying appropriate format and framework. Additionally, the editing stage involves reviewing and resolving mistakes at sentence level, including vocabulary, structural, punctuation, and writing style problems (Rubchak & Lenda, 2022).

## **2. Section Two: Academic writing**

### **2.1 Definition of ACADEMIC WRITING**

According to Gurung (2022), academic writing is a different type of expression that contrast from common writing, requiring logical structure of thoughts and technical skill. Academic writing is a distinct form of writing characterized by its formality and objectivity, in contrast to fiction, poetry, journalism, and general communication. This type of writing is based on facts, not opinions. Writers use it to present new knowledge and analyse previous studies. Academic writing is not limited to one type only, but rather it encompasses different types of work; among them are research papers, essays, dissertations, and literature reviews. Moreover, Yusuf (2024) states that Academic writing work as a vital instrument for sharing study result, enhancing critical thinking abilities, and contributing in academic discourse. It emphasizes objectivity, reliance on empirical data, and the incorporation of references to reinforce arguments. Academic writing performs numerous objectives in academic discourse. It seeks to present research outcomes, address specific questions, explore issues through personal viewpoints, and synthesize existing research (Barasa, 2024).

Academic writing is intended mostly for students and scholars, necessitating a strong proficiency of the English language and intercultural competence (Leon, 2023). According to Chauhan (2022), academic writing is distinguished by its neutral tone, objectivity, and unbiased approach, which strengthen coherence and the ability to convince. It follows recognizable patterns that make it easy for readers to keep up with arguments. It also adheres to familiar structure that enable audience understanding and interaction with arguments. It is defined by logical arrangement of thoughts, technical language, and an emphasis on developing individual ideas within paragraphs (Gurung, 2022; Šafranĵ et al., 2022).

Cohesion in academic writing connects sentences and ideas to establish a logical relationship between text element. Cohesion in research writing, according to Episiasi et al. (2022) and Multazam et al. (2023), is critical for linking concepts and forming connections between text components. Current research has investigated both structural and terminological cohesion in different contexts. Linguistic cohesion includes citations, connectors, substitutions, and omission, while lexical cohesion involves repetition, similar expressions, and collocations. Bui (2022) also claimed that studies has indicated that learners commonly utilize sources, linking words, and vocabulary words in their text, but also commit mistakes as a result of misunderstanding linguistic elements and writing standards.

Al-Dulaimi & Al-Nuaimi (2022) support this claim by stating that cohesion serves a vital function in constructing linked and coherent writing within their contextual and cultural setting. It serves as the internal framework that connects statements and passages, ensuring cohesive flow. Although cohesion signifies the linguistic relationships between writing components, consistency relates to the general clarity and harmony of meaning (Al-Dulaimi & Al-Nuaimi, 2022; Mahmudova, 2023). The development of audience interpretation in writing require an active interaction between writers and interpreters (readers) . Gultom (2022) recommends a mediating perspective that considers both writers purpose and reader understanding, leading to deeper meanings.

In addition, modern study stresses the essential contribution of readers' capacities in understanding linguistic connections (Mamba, 2024). Research writing is a complex procedure that demands systematic structure and development of concepts within sections and extended components of discourse (Barasa, 2024).

## **2.2 Types of academic writing**

According to (University of Sydney ,2022) as cited by Meroua Aziz & Noudjoud Hassani, (2024) Academic writing includes four most common types: Descriptive, Analytical, Persuasive, and Critical Writing. Each type has its unique features and distinct purpose. According to Chauhan (2022), it incorporates multiple forms of tasks, including descriptive, analytical, persuasive, and critical writing. The following are four frequently used styles of academic writing :

### **2.2.1 Descriptive Writing**

Descriptive writing focuses on illustrating the reality as it is. If writers want to answer questions like "what," "where," "when," and "who," then descriptive writing is the best choice. Writers use it most often to summarize articles or detail experimental outcomes. According to Anggraini (2020), descriptive writing is an essential skill instructed in secondary schools, centring on illustrative sensory details to clarify subjects to readers.

### **2.2.2 Analytical Writing**

Analytical writing goes deeper than describing through answering questions like "What does this mean?" Its focus is to analyse, compare, and organize facts into patterns according to their significance. For effective analytical writing, the process should be structured around specific analytical themes; however, clarity must be ensured as it guides the reader through the analysis (University of Sydney ,2022) as cited by Meroua Aziz & Noudjoud Hassani, (2024).

### **2.2.3 Persuasive Writing**

Persuasive writing focuses on convincing the reader. The writer must be open to the point of view of the other side and discuss their ideas intellectually. When writing, the writer needs to support his / her point of view by adding evidence from research or literature in order to solidify his / her arguments. This type of writing is common in essays (University of Sydney ,2022) as cited by Meroua Aziz & Noudjoud Hassani, (2024).

### **2.2.4 Critical Writing**

This type is similar to persuasive writing with a slight difference. While persuasive writing focuses on convincing the other side that the writer's idea is the correct one by using evidence to support it, critical writing is not limited to only two points of view (the writer's and the opponent's view) but to multiple ones (University of Sydney ,2022) as cited by Meroua Aziz & Noudjoud Hassani, (2024). The writer must have acquired the ability to summarize, evaluate, and interpret to formulate opinions critically.

## **2.3 Academic Writing Genres**

According to Sheldon (2019, p. 4), genres are social actions used to achieve a particular purpose for a particular audience and context. The ability to understand used genres is part of becoming a member of a given community. Academic English has spoken genres, including lectures, seminars, presentations, etc., as well as written genres such as essays and reports. The most common genres that students encounter throughout their academic journey include essays, research proposals, dissertations, and articles.

### **2.3.1 Essay**

An essay is a language skill that university students have to acquire and master. It contains various paragraphs centered on a particular subject, with a minimum of three paragraphs required. However, the usual format for academic writing is usually a five-paragraph essay.

According to Seytnazarova (2022), an essay is an organized written work that interprets and assesses a topic, derived from the French word "essayer" meaning "to try" or "to attempt". This aligns with Khojakulova's (2020) perspective that essays are commonly composed of several parts addressing a specific topic.

Usually in academic writing, the essential organization of an essay includes an introduction, body paragraphs, and conclusion (Rulik Setiani, 2019). The length of an essay is about three to five paragraphs. Each part of an essay has its unique characteristics; for example, the introduction introduces the topic and the main idea that will be discussed (thesis statement) throughout the whole essay, while the body is full of arguments that support the thesis statement. The conclusion restates the thesis statement as a reconfirmation, and summarizes the ideas discussed in the body of the essay.

### **2.3.2 Research Proposal**

A research proposal is an outline of a future study; it consists of a research topic, a methodology, a literature review, its objectives, its significance, its outcomes, and its contribution to the field. According to Malakar (2022), a research proposal is a detailed description of a planned study designed to explore a specific problem. Before proceeding with the research proposal, the researcher must get authorization from a professor, a thesis advisor, or a supervisor.

### **2.3.3 Research Articles**

One of the most popular genres in academic writing is research articles. Ghanad (2023) states that research articles are academic writings that contribute to the current knowledge through structured research and assessment of a particular topic. In addition to Johnson & Smith (2023), scientific research articles are a fundamental type of publication that seek to support the progress of knowledge in various domains. They go through a rigorous peer review process to ensure the research presented is of reliability and accuracy. Moreover, these articles are crucial for bridging gaps in prior studies serving as a medium for writers to provide new knowledge and contribute to advance academic discourse (Singh, 2023).

### **2.3.4 Dissertation**

In academic contexts, once postgraduate or undergraduate students are about to finish their studies at university, they are asked to prepare an academic assignment called a dissertation. A dissertation is a research project, and an extension to a research proposal. It is used to assess learner's skills, abilities, knowledge, and performance in their field. According to Harsoor et al. (2022), a dissertation is considered as a significant and unique study, typically necessary for the achievement of higher academic degrees, such as a master's or doctorate degrees. It works as a practical exercise that educates students on research methodology, supports academic writing, and develops critical thinking abilities.

### **2.3.5 Dissertation components**

Choosing a topic is the first step to take. Once this is done, a supervisor's approval is required to be able to carry on the study. A dissertation consists of many components, such as an introduction, a literature review chapter, a methodology chapter, a findings and results chapter, references, etc. usually the length of a dissertation is Decided by the academic institution or department offering the degree.

Additionally, the dissertation writing process encompasses thorough methodologies and commitment to specific academic guidelines, stressing the value of originality and the contribution of new findings to the domain (Anikin & Poyzner, 2024). Moreover, Current dissertations often cover a variety of research methods, including qualitative, quantitative, or mixed methods, and they make a meaningful contribution to the academic discourse within particular fields (Swygart-Hobaugh et al., 2022).

## **2.4 Academic Writing challenges**

Most of the time, EFL learners face difficulties in their learning processes, especially when it comes to writing, due to their unfamiliarity with the target language. However, teachers are responsible for detecting, solving, or hindering these problems, to prevent them from affecting learners' progress. The main problems will be discussed in the next sub-sections.

### **2.4.1 Lack of Vocabulary**

According to Asaad (2024), academic writing presents major difficulties for learners and scholars, particularly in word choice and language use. Research indicates that word structure recognition and lexical competence serve key as functions in enhancing writing abilities, especially for foreign language learners. Besides, EFL learners usually have a limited amount of vocabulary, which obliges them to use the same words again and again; as a result, they fall into repetition, which renders their writing to appear redundant (Adas & Bakir, 2013). Additionally, language interference is another problem; once EFL learners cannot find the intended word that expresses their exact meaning, they either keep the word missing or use a word from their mother language instead of the target language (Mulyana, Zuhri, and Yauri, 2021).

### **2.4.2 Grammar Mistakes**

Grammar rules primarily consist of multiple principles such as verb forms, prepositions, parts of speech, active and passive voice and many others. These rules create obstacles for many learners in writing. According to Rekibi (2016), EFL learners are unable to write until they have sufficient knowledge about language rules and structure.

However, Seely (1998, as cited in Rekibi, 2016) identified some common problems that learners keep committing in their writing: at the sentence level, learners find some difficulties, as they may not be able to differentiate nouns and verbs. Moreover, students face problems when using the correct conjunction (level), which can be a problem for the reader. Furthermore, they may find it difficult to place adverbs (level) in the right place or to arrange words (level) in their correct order, which can lead to changing the meaning of the written text. In addition, academic writing entails key obstacles for learners of different levels. Frequent grammatical mistakes include difficulties with verb tense usage, subject-verb agreement, prepositional usage, and articles (Iqbal & Saeed, 2021; Garduce & Baluyos, 2023; Anh et al., 2022).

### **2.4.3 Punctuation and Spelling**

According to Arwal (2019), learners do not pay attention to punctuation, although it is important, as it plays a crucial role in conveying the meaning of the written text. The misuse of punctuation marks is a reflection of their lack of knowledge. Arwal (2019) noticed that EFL learners do not pay much attention to their punctuation, nor do they know the correct spelling of words in English.

Additionally, academic writing entails considerable difficulties in punctuation and spelling especially among EFL learners and English as Second Language (ESL) learners. Studies demonstrate a frequent occurrence of punctuation and spelling errors among Iraqi EFL learners, with common punctuation mistakes involving the misuse of capital letters, commas, and periods, and spelling errors primarily involving omission, replacement, transposition, and addition (Raheem & Ghafar, 2024). Other studies identify persistent difficulties in academic writing for EFL learners and research scholars. Frequent mistakes include capitalization, punctuation, and spelling mistakes (Putri, 2024; Raheem & Ghafar, 2024).

## **3. Section Three: ICT in Education**

Writing is regarded as a complex skill for students to acquire as a result, teachers, and scholars have explored the use of (ICT) examining the benefits, drawbacks of integrating these tools to support, facilitate the writing learning process.

### **3.1 What is ICT?**

In recent times, ICT has transformed how people acquire knowledge, teach, work and live their daily life. It has reshaped practically all domains in human daily life, especially education. The abbreviation of ICT denotes "information and communication technology" which incorporates all the devices, applications, systems, and networks used to facilitate data transfer at unprecedented rates. They serve as supports facilitating sharing, analysing, and transferring information on various domains, including health, education, entertainment and transport, in a short time.

Under the same context, Triki (2021) described ICT as a comprehensive term linked to technologies that save, modify, and collect data in multiple digital forms. Similarly, ICT is conceptualized as an inclusive concept that incorporates technologies for communication, data transmission methods, and software applications (Kabra, 2023).

Extending the early description, Verma (2023) characterised ICTs as tools used to archive, reach, transmit, and manage information. This term encompasses numerous types of technologies, devices, and systems that assist in the gathering, handling, storage, and sharing of information.

### 3.2 Components of ICTs

As stated by Routray & Mohanty (2024), ICT contain tools including devices, programs, networks, and equipment for communication, which are crucial for data exchange. In the same context Information and Communication Technologies (ICTs) cover three fundamental elements: equipment, software, and connectivity (Hartvigsen, 2020).

Kuldeep Verma (2023) highlights five essential parts of ICT: hardware, software, data, networks, and people. According to Verma (2023), these components collaborate to create an ICT framework that can store, analyse, and exchange information aligned with necessities of an organization or individual. He clarifies these parts as follows:

- **Hardware:** The physical parts of an ICT system, such as devices, printers, and networks.
- **Software:** The programs that operate on the physical components, including operating systems, application programs, and middleware.
- **Data:** The information preserved and processed by the ICT system, which potentially contains documents, visual, and audio-visual files.
- **Networks:** The links that allow hardware and software to cooperate, including the internet and local networks.
- **The users and administrators:** They are responsible for monitoring and running the ICT system.

### 3.3 Benefits of incorporating ICT in learning and teaching

The integration of information communication technology to EFL teaching and learning is viewed as a transformative change in the domain of education. It has substantial influence on the process of second language acquisition (SLA). Diverse engaging apps, digital and simulated learning environments...etc., have enriched the knowledge acquisition process. Many scholars and experts in the field emphasized the prospective benefits of incorporating ICT's into the learning and teaching process. According to Mai (2020), ICT promotes access to an extensive variety of web-based resources, fostering cooperation and communication among students, which is especially beneficial in language learning contexts. Similarly, Rama (2022) found that embedding ICTs into the educational process provides multiple advantages that boost learning

experiences. Initially, ICT encourages an interactive and active learning atmosphere, enabling students to learn at any time and place, which is vital in the digital age.

In the same context, Reddy & Reddy (2022), emphasize that the incorporation of ICTs into learning presents various strengths for educational practices. ICTs can enhance educational quality, increase educational opportunities, and establish beneficial learning environments.

Additionally, Kavitha (2023) highlighted the positive aspects of using ICT in language learning, indicating the following: Technology has made language learning more interactive and enjoyable by igniting an interest to learn. It permits learners to engage with others through the internet without leaving their homes, supporting to develop and maintain worldwide relationships without any geographical obstacles. Furthermore, ICT tools foster competence-based teaching, providing for varied educational experiences and advanced outcomes with the aid of formative assessments (Toma et al., 2023).

## **4. Section Four: self-correction**

### **4.1 Definition of self-correction**

Traditionally, teachers have been the primary source of feedback for learners. However, modern educational strategies integrate additional techniques to provide correction and fix mistakes. Additionally, the self-feedback approach transforms the teaching-learning process from teacher-centered to student-centered. In other words, learners recognize and correct their own mistakes autonomously without assistance from others. Students are dynamic participants, experiencing an autonomous role in their educational journey. Various scholars have investigated the idea of “self-correction” in numerous ways. BusyTeacher.org (2018), argued that self-correction occurs when learners rectifying their own faults rather than counting` on the teacher to help them. This process is spontaneous for monolingual and bilingual students, in spoken and written languages. The capacity for self-correction offers learners substantial benefits.

According to Garcia & Martinez (2018), self-correction involves making linguistic corrections after receiving constructive criticism from an instructor. They noted that self-correction refers to autonomous learners who possess self-control. This signifies that when learners make errors in grammar and articulation, and other language aspects, they rectify it without external help. In the same stream, self-correction in the context of education refers to a student’s capacity to detect and correct his or her own mistakes. Scholars have studied it in

multiple settings, including language acquisition and cognitive function. In writing, self-correction techniques can help students improve competencies and engagement (Dahal, 2023).

In short, self-correction is the process of correcting mistakes made by oneself during writing or speaking. This technique is an effective way to foster learner's comprehension toward the target language both in structural aspects and in meaning. Teachers must assume the responsibility to inspire and support students' language learning to correct their own mistakes since it is part of students learning process.

## **4.2 Benefits of self-correction**

Self-correction enables learners to reflect on their own awareness of the language they are using both grammatically and conceptually. Therefore, self-correction promotes students to take responsibility for their own learning, since teachers cannot rectify every mistake all the time.

Balderas and Caumatzi (2018) emphasized the positive aspects of self-correction techniques, noting that they boost students' recognition of their mistakes, enable them to self-revise, and encourage responsibility for their own education. These strategies also enable learners to concentrate on their particular errors, as teachers often have insufficient time to handle personal mistakes due to the need to address errors that are more common.

Additionally, self-correction in learning provides various advantages that improve both learning and engagement of student. Studies show that autonomous mistake revision substantially improves linguistic competence and participation among English language students, encouraging self-reliance in their academic progression (Adam, 2024).

## **4.3 ICT tools used in self –correction**

Writers can utilize ICTs tools for self-correction in the writing process. The Cambridge English Dictionary describes software as computer tools that accomplish multiple operations. Whereas, text processing characterized as the process of generating and organizing files, letters, and other written content in digital format on devices.

As mentioned by the scholar David Hartshorne (2023), the foremost tool is grammar-checking tool. This instrument, denotes to apps or online tools, is used to revise grammatical errors or misspelling in order to enhance learner's cohesion and coherence while they are writing.

The following are examples of grammar checker tools are categorized into subgroups according to the objective and measures, such as:

- **Grammarly:** A tool that checks spelling, sentence structure, punctuation, and writing style to assist users write more precisely and properly.
- **Wordtune:** A tool utilized for paraphrasing, summarizing or extending text.
- **ProWritingAid:** utilized to assess papers to facilitate students and writers develop their writing abilities.
- **Microsoft editor:** An application where the user may verify on features like adjective order, passive voice, adverb placement, to develop writing skill, make it more regular, and standardize.
- **Word rake:** A program applied to improve clarity, simplicity, conciseness, and remove unnecessary descriptive terms or omit informal language to be professional.
- **Language tool:** A smart writing tool that scans your grammatical structure, spelling accuracy, and style. It uses AI to upgrade user texts and adapt to their personal writing style.

In parallel research, AlAhdal (2020) addressed computer assisted error analysis. This is an artificial intelligence (AI) proofreading method, which is practical for identifying and rectifying writing errors. We listed three from the fifteen of the most widely used and mostly cost-free tools:

- **Grammarly:** It is one of the most widely adopted writing assistants, used by a vast number of individuals. This tool corrects over 150 different types of errors like grammar, punctuation, word structure, writing style, logical spelling, and word structure, detecting errors as users input content.
- **ProWritingAid:** This tool can investigate text writing to correct any irregularities, ambiguity, repetitiveness, passive voice, sentences that are too complex, and much more. It generates 25 reports on language style, structure, overused words, platitudes, pronouncements, consistency, comprehensibility, unclear words, homonyms, abbreviations, complex words, and plagiarism.
- **Reverso:** This error analysis tool is simple to use. It enables users to achieve a decent degree of composing capability by correcting even the most complex errors rapidly and accurately. The tool provides appropriate revision options among which users can select on the basis of writing context.

## 5. Previous studies

Studies such as Fitria (2021) examined the effectiveness of Grammarly, an AI-powered grammar checker, in improving EFL students' writing performance, Using a Descriptive qualitative research method . The findings were a Significant improvement in students' writing. While Alotaibi (2023) study aims to assess the impact of AI-powered Grammarly on enhancing the grammar proficiency of Saudi EFL students,using descriptive quantitative approach and results revealed that grammarly boosted students motivation , confidence , and improved grammar accuracy ,correction ,and feedback. However, some students expressed concerns over its flexibility and potential inefficiencies in the free version .Akbar (2023) Investigate students' **perceptions of Grammarly** as an online grammar checker for thesis writing , using a mixed method (quantitative , qualitative ) .the results were positive .however the Overreliance on Grammarly can limit students' ability to learn grammar. The findings have shown that Grammarly, QuillBot, ProWritingAid, ChatBot, Scribber, etc. play a crucial role in improving learner's academic writing. These studies demonstrated the enhancement in grammar accuracy, sentence structure, writing quality after using these tools. Similarly, Fitria (2021) revealed how students writing scores upgraded after using one of these tools (Grammarly) to reach 77/100, drawing attention to the effectiveness of these tools, especially when it comes to automated spelling, punctuation, and capitalization correction. According to Alotaibi (2023), students perceived Grammarly feedback positively, as it boosted their self-confidence in writing . In parallel an Algerian study conducted at ouragla aimed to Investigate the Use of AI Tools to Enhance Learners' Writing Skills in the EFL Classroom (Doctoral dissertation, Kasdi Merbah Ouargla University) .the study used mixed method ( quantitative , qualitative) . The findings were positive as AI chatbots like ChatGPT are useful in generating ideas , refining content, and structuring arguments in a short time ( Imane & Siham, 2024) which can be helpful to learners, especially if they want to formulate their thesis easily . Students use AI to help them write their thesis in planning, drafting, editing, and finalizing (Renaldo, 2024). In addition, ChatGPT increases student's vocabulary and coherence .however Teachers acknowledged AI's potential but expressed concerns about overreliance, which could hinder critical thinking and originality. (Imane & Siham, 2024).

Moreover, some researchers examined student's perception of using these AI tools for their self-correction, like editing and revising their academic work (Driane et al., 2024; Yousra, 2024; Aidi Wail Abdennour, 2024). They concluded that students perceived these AI tools positively, as they made it easy for them to edit by themselves, correct grammar, and improve academic formality (Driane et al., 2024).

Furthermore, the impact of AI tools on critical thinking skills was the main concern of some researchers. A study conducted with 25 university students found that after six weeks, the enhancement and the ability that students gain after using these AI tools, such as creating cohesive arguments, refining language, and incorporating evidence, are significant (Rizkiani et al., 2024).

Additionally, fewer studies focused on AI writing tools beyond Grammarly and ChatGPT, such as ProWritingAid and Wordtune (Fitria, 2023; Al Mahmud, 2023). Specific features characterize each AI; for example, when it comes to grammar and syntax correction, Grammarly is the best option, while Wordtune is beneficial for paraphrasing and varied lexical repertoire and sentence complexity. On the other side, ProWritingAid excels in stylistic improvements and coherence. A study conducted by Al Mahmud (2023) on Wordtune showed the comparison between this tool and traditional editing methods, and how Wordtune enriched lexical flexibility and sentence complexity.

Other researchers have compared AI-powered writing assistants with traditional teacher feedback (Schlosser, 2023; Ünlüer, 2024). Although AI is effective in identifying grammatical errors it lacks the depth of human feedback, such as coherence, argumentation, and structure (Schlosser, 2023). Equally, Ünlüer (2024) shares the same result, although students liked AI instant corrections, but learners still prefer human tutors and consider it the best option for personalized feedback and engagement. The drawbacks of AI are not only limited to this, but over-reliance on AI grammar checkers are widely discussed. Studies revealed that the overuse of AI like Chatgpt could lower critical thinking and originality (Imane & Siham, 2024).

In addition, Wail Abdennour (2024) mention that AI automated suggestion make students afraid to lose their voice in their writing. Similarly, studies conducted by Akbar (2023) and Amina & Kahina (2023) uncovered the reality that Grammarly and similar tools do not teach grammar rules; this leads to passive learning as a result, and reduces self-editing skills.

Not only that, but researchers also discussed the danger of plagiarism, academic dishonesty, and AI-generated content, which led some institutions to set guidelines for using AI, as the students do view AI-generated content as plagiarism but as “working smarter” (Hiouani & Khiari, 2024; Anggarini et al. 2023). In another study, Basiana et al. (2024) shed light on the importance of training students to use AI correctly to avoid plagiarism. While AI can be a supportive tool, it should be used wisely to maintain independent learning and critical thinking.

These studies, which examined the benefits, drawback and impacts of using AI checker tools, form the basis of our study which is investigates the use of AI grammar checker tools on dissertation writing by EFL learners. Our aim behind this study is to find out to what extent students are willing to use AI grammar checker tool in writing their dissertations, and what specific features they use the most. We are also interested in the common types of errors those students tend to correct using grammar checking tools. In addition, the factors that encourage learners to use grammar-checking tools will also be investigated. The last objective is to explore how teachers perceive the impact of Grammar checking tools on student is writing skills. In this research, we focused on the context of our university to keep it updated with recent researches findings, and to help students get used to these innovative tools and benefit from them. In addition, it is necessary to confirm the necessity of teaching it. Moreover, it should be included it in the curriculum.

## **Conclusion**

In this chapter, we discussed four main sections related to our study; the first section explains the writing skills, provides the definition of writing, and outlines the main steps in the writing process.

The second section explains the concepts of academic writing and four types of academic writing (descriptive and analytical, persuasive, critical writing). This section also discussed the most common academic formats like essays, research proposals, and dissertations. Additionally, it identifies the challenges that students face in academic writing including Lack of Vocabulary, Grammar Mistakes, Punctuation and Spelling. The third section explain the role of ICT in education. It defines ICT as a technology used to manage and share information including devices like computers. This section also explains the main components of ICT and highlights the benefits of using ICT in teaching and learning. It also sheds light on how digital tools can transform modern education. The forth section highlights the idea of self-correction in writing and explains the benefits of self-correction. Additionally, the section explores ICT tools that support self-correction, and shows that by combining self-awareness with digital tools students can enhance their writing skills.

In general, the chapter shows how writing skills, academic writing and its problems, ICT tools, and self-correction strategies work together to help EFL learners improve their writing proficiency.



# **Chapter II: Methodology**

## **Introduction**

The present chapter focuses on the methodology utilized in this study. The methodology serves as the foundation for the research process, ensuring that the researchers conduct the study systematically; the findings are credible, and valid. This chapter addresses the use of grammar checker tools by EFL learners in dissertation writing at BBA University. It investigates student's perceptions towards these tools in enhancing their writing skills, and explores how teachers view these tools. The selection of the suitable methodology and research tools aid in the development of the study. Firstly, it introduces the research approach, followed to conduct the study. In addition, it presents the various research paradigms along with the relevant philosophy adopted for this particular research. Then provides details including the research design, study sittings, target population, and sample. The basic instrument used in this study is a survey intended for students and teachers. The purpose of this instrument is to assess and investigate the usage of grammar checker tools in enhancing the writing skills of EFL students in their dissertation writing. Finally, it outlines the procedures for collecting, analysing, interpreting, and evaluating the data as well as the ethical considerations and limitations of the study.

### **1 Research approach**

This study will follow a quantitative approach. Researchers define this approach as a method that uses numerical measurements, and statistical analysis to explain phenomena and contribute to generalizations from larger population. (Pandey et al., 2023; Vijayendra et al, 2023). This approach is commonly used due to its effectiveness in measuring behaviors, perspectives and trends along with its capacity to produce findings that can be generalized. (Vijayendra et al, 2023).

In this study, a quantitative method was preferred because it aligns with the intentions of measuring, and studying specific aspects of grammar checker tools in dissertation writing. This approach enables gathering statistical data such as the extent willingness to use these tools, the frequency of feature utilization, the types and frequency of writing errors, and the factors that influence tools adoption. In addition, it facilitates the examination of teachers' perceptions through a standardized survey instrument. The quantitative approach is suitable as it generates objectives, statistical insights into patterns, trends, and correlations, ensuring generalizable

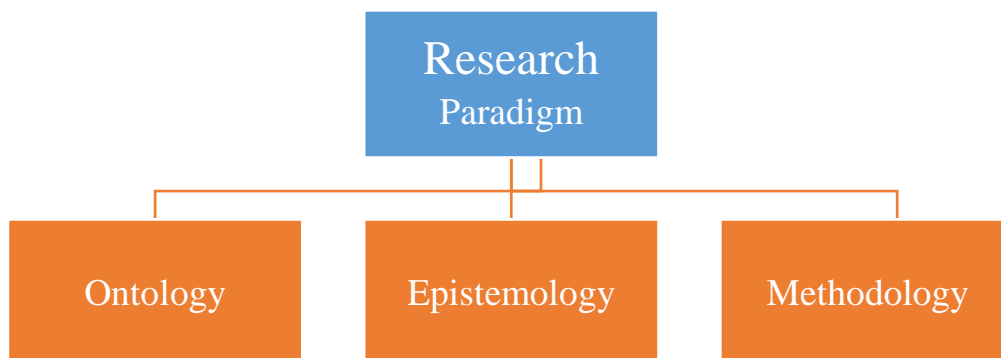
findings about the role of grammar checker tools in academic writing. The fundamental objective of this methodology vastly distinct from that of the qualitative methodology.

This approach based on objective results and prioritizes numerical data, which minimizes ambiguity and makes it easier to measure, analyse, and interpret data, making it appropriate for studies that requires measurable outcomes.

This framework follows a structured process that facilitates the study design, allowing other researchers to replicate the study. Moreover, a larger sample size allows researchers to generalize the findings to a broader population. The quantitative approach enables the systematic comparison of results across different groups, regions, or times. Standardized tools such as surveys, questionnaires and other tools utilized in quantitative research ensuring reliability during data collection. Additionally, applying statistical tools enable researchers analyse the data, and turn it into meaningful conclusion, these statistics serves as evidence to reinforce the credibility, and trustworthiness of the research findings. This research study follows the positivist paradigm, which assumes that reality is objective, and empirically verifiable through the use of measurable data, by collecting, and analysing data quantitatively. Therefore, this research seeks to identify patterns, correlations, and generalizable findings regarding the use of grammar checker tools in dissertation writing.

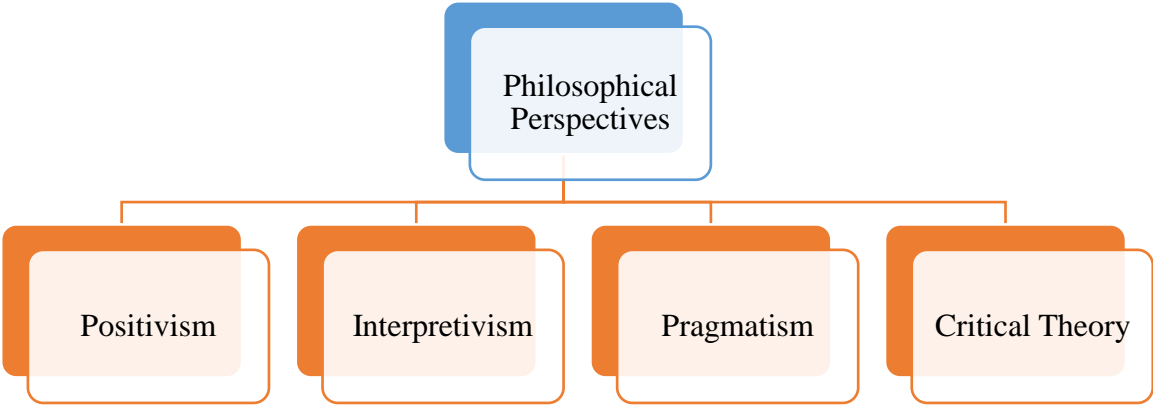
## 2 Research paradigm

A research paradigm is a philosophical framework that the research study is based on. It guides how research conducted, interpreted, and understood. The research paradigm consists of three components, which are ontology (the nature of reality: what is reality), epistemology (how is it possible to know reality, nature of knowledge), and research methodology (approach to inquiry). Both ontology and epistemology form the research philosophy, while the research philosophy and methodology form a research paradigm.



**Figure 1:** Research Paradigm

The research paradigm is divided into four philosophical perspectives: positivism, interpretivism, pragmatism, and critical theory. Selecting a suitable paradigm ensures that research methods, data collection, and analysis are logically consistent.



**Figure 2:** The Philosophical Perspectives of the Research Paradigm

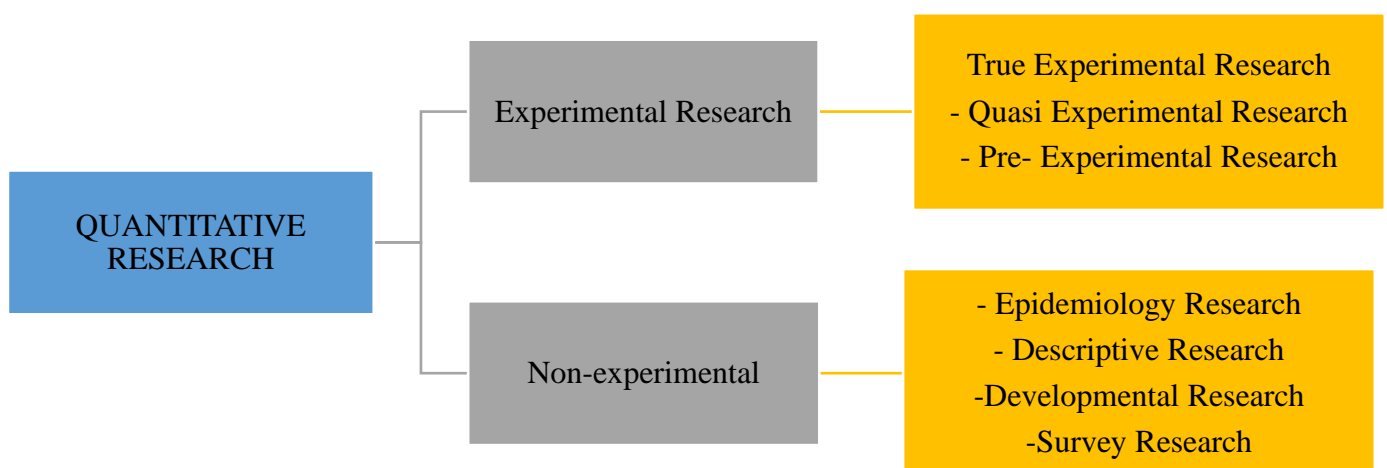
This study follows the positivist research paradigm, which focuses on objectivity, measurable data, and the systematic analysis of data. The quantitative approach is used in this study in order to statistically describe the use of grammar checker tools in dissertation writing. Moreover, generalizing the data ensures the validity, reliability, and trustworthiness of the research findings. The positivist paradigm influences the research design by adopting a quantitative approach; we used an online survey to collect numerical data from a large sample of dissertation writers. Descriptive statistics, including frequencies and percentages, are used to summarize and describe the utilization of AI grammar checker tools, highlighting the positivist focus on objectivity and measurable evidence. This paradigm is suitable for the study because it aligns with the research objective of describing the use of grammar checker tools. This alignment allows for objective and generalizable findings about their role in dissertation writing.

Research methodology is the practical component of any research. It encompasses the approach employed by the researcher to carry out the research, including the specific procedures, techniques, and tools used in the pursuit of the research objective. The research methodology relies on certain assumptions that constitute the validity of the research. It is necessary for any researcher to know those philosophical assumptions and adopt them appropriately for the development of the study.

### 3. Research design

According to Sharma et al. (2023), research design is a fundamental outline for conducting investigative studies, including procedures for data gathering and interpretation. A research design represents the overall plan of a research process, as it outlines the approach, and the type of design that will be used to conduct the research. The researcher uses research design to create a systematic, and a logical flow from the overall approach to the specific tools and instruments. Moreover, selecting an appropriate research design leads to the use of suitable methods that help in collecting, analysing, and interpreting the data, to ensure the reliability of results. Mahat et al. (2024) identified this point when they mentioned that the selection of a suitable research design is critical for ensuring the credibility and accuracy of the results. Research design is categorized into three designs, which are quantitative research design, qualitative research design, and mixed method research design. Each type has unique characteristics, and the research questions determine which one to use. To generalize the results, we focused on collecting a large amount of numerical data, which aligns with the quantitative design.

A quantitative research design divided into two categories: experimental design, non-experimental design, as cited by Pv and K (2020) and Peck et al. (2023). For this research, we selected a non-experimental design specifically because we are not going to make any manipulation of data. We are just going to illustrate data as it is, and for this reason, we adopted a descriptive statistical design.



**Figure 3:** Categories of Quantitative Research Design

As referenced by Raj and Priyadharshini (2024), non-experimental research designs are commonly utilized in various domains to monitor and describe behaviors, attributes, or phenomena without influencing them. A descriptive research design focus on describing behaviours, characteristics or phenomena objectively without any manipulation or bias. It helps us answer our research questions like: “What is it?” ; ”How often do master two students use Ai grammar checking tools in their dissertation?” ; “What are the common errors that students make?” , which fit for our research as it allows us to answer our research questions without delving too deep to the “why”.

#### **4. Research setting**

As stated by Manning (2020), research settings describe the environments where researchers conduct systematic investigations to establish truths and draw new outcomes. Creswell and Creswell (2017) argue that the selection of the research setting is crucial for ensuring validity, as it helps control variables and minimize interfering factors. Understanding the framework within which this research is being conducted is vital. This study took place at one of the universities in Algeria, specifically at the Department of English Language at the University of Mohamed El-Bachir El Ibrahimi in Bordj Bou Arreridj (BBA) during the second semester of the academic year 2024/2025. The targeted population included master two didactics students.

In this study, we used an online survey, which enabled us to overcome geographical barriers and ensure that participants could easily participate. Geographically, the University of Mohamed El Bachir El Ibrahimi is located in Bordj Bou Arreridj, a city in northeastern Algeria. The selection of this university was based on several factors. First, we are students in the Department of English Language; this means we have direct access to the target population. Second, time constraints also influenced our selection of study location and sample. This enhances the richness of the data collection. It also facilitates the access to participants, which is a critical factor in maximizing contribution and participation rates.

## **5. Research questions**

Given that this study seeks to investigate EFL teachers and learners' perceptions towards the use of grammar checker tools in writing dissertation, we try to fill this knowledge gap by the following research questions serve as the basis for this investigation:

- RQ1: To what extent are students willing to use grammar-checking tools in their dissertation?
- RQ2: What specific features of grammar checking tools do students use the most?
- RQ3: What types of errors are students correcting using grammar-checking tools?
- RQ4: What factors encourage learners to use grammar-checking tools?
- RQ5: How do teachers perceive the impact of Grammar checking tools on students writing skills?

## **6. Sample and sampling procedures**

According to Malik et al. (2022) and Suriani et al. (2023), population and sampling are critical principles in research design. A population refers to a group of members sharing common characteristics, while a sample is a fraction of that population. Appropriate sampling is essential for ensuring the validity and generalizability of the study results (Malik et al., 2022; Hossan et al., 2023). In our research, a sample is a subset of individuals derived from the whole population. Master 2 students were chosen to predict, generalize the results, and apply them to the whole population. Since collecting data from the entire population takes much time, and sometimes is impossible to be achieved, a sample is considered as the best option to represent the whole population,

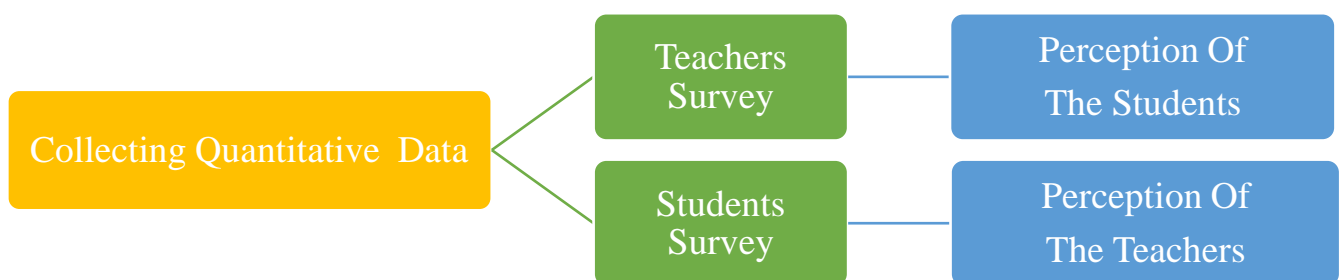
As cited by A. G (2024), probability and non-probability sampling are the two principal types of sampling methods. In the same line, Abdul Wahab (2021) & Dalowar Hossan et al.

(2023) stated that probability sampling contains simple random, stratified random, and cluster sampling, while non-probability sampling covers purposive, convenience, and snowball sampling, among others.

In collecting the data from the participants, we chose probability sampling (for generalizability) using a simple random sampling. We shared online questionnaire for both students and teachers through Telegram and Facebook group which means each student, has an equal chance to participate .This procedure allows us to collect a large a scale of data without falling in the bias issue (subjectivity) , and to remain ( objective ) . In addition, the study used purposive sampling technique to select teachers for data collection based on their knowledge and experience as supervisors, and teachers.

## 7. Data collection procedures

The data collection process involved a quantitative method to ensure accuracy, reliability, and the ability to generalize findings across a larger population. In order to collect numerical data for statistical analysis and objective result interpretation structured surveys were designed. The process of collecting data in this research based on double surveys that were used to gather information from master students and teachers at Muhammad El-Bashir El-Ibrahimi University. The first survey for the students was shared via telegram and Facebook group contain 135 students, which represent the whole population and 100 of the students answered the questionnaire, while we shared the second questionnaire of teacher via email



**Figure 4:** Quantitative Data Collection Process

## 7.1 Questionnaire process

### 7.1.1 Step 1: Design the questionnaire

We developed a structured questionnaire with closed-ended questions, multiple-choice questions, and rating scales for the learners and teachers to gather measurable data and Ensured questions were clear, unbiased, and aligned with research objectives.

### 7.1.2 Step 2: Pilot Testing

This study has undergone a process of pilot testing to ensure its validity. In fact, the questionnaire was submitted to three master two students and one teacher in order to provide feedback on the structure, and form of the items, the order of sections, and the questions' relevance to the objective and research questions of the study.

### 7.1.3 Step 3: Distribution

We used an online survey platform (Google Forms) to distribute the survey to the target population. The survey link was shared via email with the teachers and through social media platforms (telegram and Facebook) with the students.

### 7.1.4 Step 4: Data Collection

Over a predetermined period of 4 weeks, responses were collected while monitoring response rates and reminders were sent to improve participation.

### 7.1.5 Step 5: Data Export

We exported data from the survey platform into a spreadsheet (Excel or Google Sheets) and statistical software SPSS for analysis.

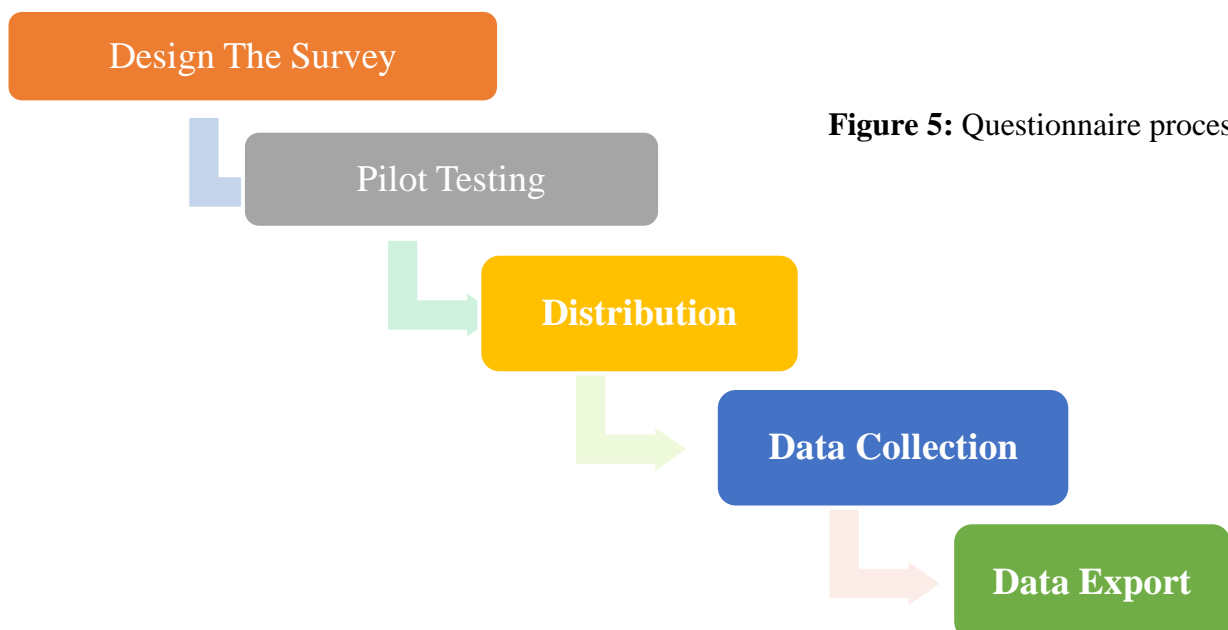


Figure 5: Questionnaire process

## **7.2 Description of the questionnaires**

### **7.2.1 Description of Students Questionnaire**

This questionnaire is designed to explore EFL (English as a Foreign Language) learners' use of AI grammar-checking tools (e.g., Grammarly, Quillbot) while writing their dissertations. Before moving to the questions, a simple definition of AI Grammar checker tools was added to remove the ambiguity about the research topic. The questionnaire is divided into five sections and contains 27 close-ended questions. The first section contains Demographic Questions that related to student's backgrounds, assessing their prior experience with grammar tools, writing proficiency, and familiarity with specific tools. The second section examines frequency of use, reasons for using tools, and perceived importance. The questions were close-ended questions. The third section effectively combines multiple-choice, matrix tables, Likert scales, and frequency-based questions. This section aims to identify common writing errors and challenges, as well as reliance on tools for corrections. In the fourth section, we focused on attitudes and ethics, investigating ethical concerns, motivations, and opinions on AI tools' impact on the writing quality and academic integrity. Finally, in the fifth section, we focused on assessing attitudes, motivations, and barriers related to AI grammar-checking tools.

### **7.2.2 Description of teachers Questionnaire**

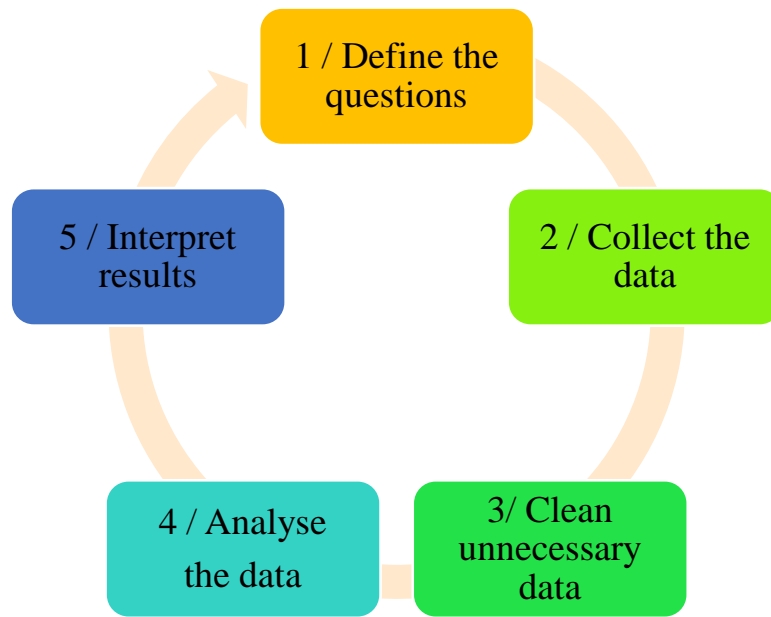
This questionnaire is designed to explore EFL (English as a Foreign Language) teachers' use of AI grammar-checking tools (e.g., Grammarly, Quillbot) while writing their dissertations. The questionnaire is divided into five sections and contains 11 questions. The first section includes demographic, behavioural, and opinion-based questions to gather background information about the respondents (teachers). The second section assesses perceptions of grammar-checking tools' effectiveness. The third section focuses on perceived effectiveness of grammar-checking tools and potential overreliance concerns. The fourth section, examines how grammar-checking tools influence students' critical thinking skills in writing. The last section includes questions that focus on the benefits and challenges of grammar-checking tools in EFL classrooms.

## **8. Instrumentations**

For the method, we chose an online survey to gather the necessary data. The reason behind our selection is that online survey is the best option for us to collect data, as it helps us collect data free and in a short time. In addition, it helps participant to answer the questions on their pace, and in their convenient place. To analyse the collected data, we used a statistical analysis Microsoft Excel to analyse the results automatically, effectively, and in a short time. Data collection tools are fundamental to research, encompassing various methods for gathering primary and secondary information (Mazhar, 2021). A descriptive study was conducted through designing online questionnaire being the most appropriate tool to achieve this aim, and allow answering the research questions. This research instrument was employed to collect quantitative data effectively, ensuring accurate measurement of the variables, and facilitate the analysis of their interplay .The instruments consisted of number of questions. The questionnaire for EFL university students and teachers. The questionnaire served as the main source to gain insight into students and teachers perspective. This carefully constructed questionnaire was tailored to elicit responses from EFL teachers and students at Mohammed al Bachir Ibrahim university-BBA regarding their perspective on using the AI grammar checker tools in writing their dissertation. Since the main aim of the study is this study aimed to provide a statistical analysis of EFL master two students' frequency of use and common patterns of AI grammar checking tools application in dissertation. It also sought to assess teachers' perspectives on the impact of using these tools by students on their writing skills. Concentrating exclusively on this questionnaire, the research maintained a focused and cohesive data collection approach, ensuring that it effectively addressed the study's distinct research objectives.

## **9. Data analysis procedures**

According to Chadli et al. (2021), data analysis is an essential element of research methodology, permitting the interpretation of gathered data to formulate meaningful results. Data analysis is a vital part of any research study. It allows for the explanation of the collected information in order to draw significant conclusions. Since the study based on quantitative method it will focus on collecting numerical data. The nature of quantitative data is numerical as mentioned by Barella et al. (2024) that quantitative research methods are fundamental in different scientific domains, centering on statistical information and analytical analysis to gather, analyze, and interpret outcomes.



**Figure 6:** Analysing statistical process

The goal of data analysis as stated by Li (2020) and Abulela and Harwell (2020), is to enhance inferences and explain the collected data in connection with study issues. It includes categorizing, quantifying, and evaluating measurements. The researchers administered the survey using Google Forms and shared it through social media platforms (Telegram group – Facebook group). After the data collection procedure was finished, each question was analyzed independently using the descriptive statistical analysis in particular, frequency and percentage. The use of descriptive statistics was aligned with the nature of the study, which is non-experimental and descriptive. The collected responses were exported from the online platform (Google form) into a suitable data analysis software (SPSS Statistics). The representation of the results was in the form of tables, pie charts and bar graphs, accompanied by explanations and clarifications followed each table or graph.

## 10. Ethical consideration

This study adhered to ethical research practices and guidelines to avoid any ethical issues that may arise during its conduct.

- **Informed consent:** we provide participants with detailed information about the study from aim to significance, procedures, risks, benefits, and their right. The participants had the freedom to join the study as volunteers regardless of their status as teachers or students and they could leave the study at any point.
- **Participants confidentially:** The research protected participant privacy through numerical coding for data analysis and reporting purposes while maintaining complete data confidentiality.
- **Protection of participants:** This study uses anonymous participants' information, numerical codes for data analysis and reporting, and ensures secure data collection. The research environment became secure for participants to express their thoughts and experiences because privacy was the top priority.

## 11. Limitations and Delimitations

### 11.1 Limitations

Online surveys face several challenges that can affect their effectiveness and reliability. One major issue is limited reach, as these surveys may exclude populations without internet access or digital literacy, thereby limiting the diversity of respondents. Additionally, technical difficulties such as poor internet connectivity or device compatibility problems can hinder participants' ability to complete the survey. Time constraints further complicate matters, as participants may have limited opportunity to respond, potentially affecting the quality of their answers. Another concern is participant honesty, as responses may be biased or inaccurate due to social desirability or dishonesty. Privacy concerns also play a role, as participants may be hesitant to share sensitive information online, which can lead to incomplete or guarded responses. Question misinterpretation is another challenge, as participants might misunderstand

questions without a researcher present to provide clarification. This can lead to data quality issues, where participants rush through surveys or provide random answers, compromising the reliability of the data. Moreover, researchers have limited control over the environment in which participants complete the survey, which can introduce external factors that influence responses. Finally, online surveys often suffer from limited contextual understanding, as they may not fully capture the context or nuances behind participants' responses, reducing the depth of insights gained. These challenges highlight the need for careful design and consideration when conducting online surveys.

## **11.2 Delimitations**

Delimitations are the guidelines that the researcher establishes as the boundaries of their study, which are within their control. The researcher established certain limitations to enhance the study's focus and manageability. For the delimitations of the problem under investigation, there are some points we take it in consideration as boundaries for our research:

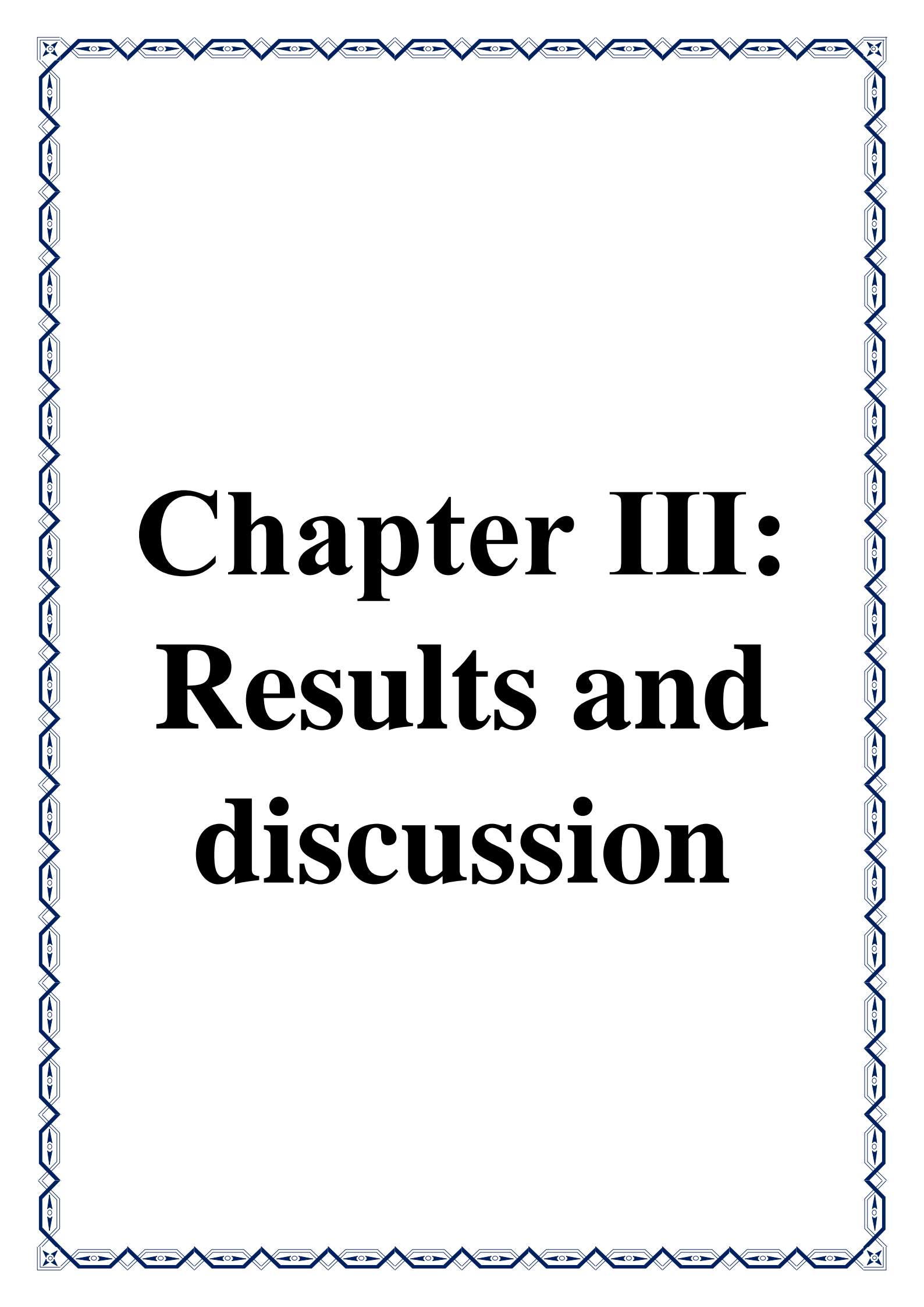
- Firstly, the researcher chose master two students as a population for his study because the focus of the study is writing dissertation. Therefore, master two students were perceived to be a convenient population for the study.
- Secondly, the researcher conducted the study in the second semester of the academic year 2024-2025. The researcher determined the period between the months of March and April and May as an appropriate period to conduct the study because it generally lies within their preparation period to write their dissertations.
- The third delimitation was the use of Facebook and telegram as a virtual platform for conducting online peer feedback among all possible and available tools. The chosen of this tools because it is the cheapest and the most popularly used tool for connecting people together because it saves both the researcher and subjects a lot of time and effort.

## **Conclusion**

This chapter serves as a foundational guide to the methodology employed in this research. In this part, the data collection and analysis that guided this study to explore teachers' and learners' perceptions and practices towards the use of grammar checker tools in writing dissertation.

In this section, we extensively described the main terms and concepts in research methodology, clarifying the research approach, paradigm, and design. Besides also including the research setting and research questions. Furthermore, sample and sampling procedures, data collection procedures, and instrumentations. In addition, the data were gathered using (online questionnaire for students and teachers). Each methodological choice has its rational justification, in order, to provide objective, measurable insights into the research questions. Moreover, it highlighted the data analysis procedures used in this study. Additionally, Ethical issues, limitations and delimitations were addressed in the study.

In the next chapter we will present and analyse the findings obtained from the online questionnaires to clarify the main findings, and perceptions that the study established.



# **Chapter III: Results and discussion**

## Introduction

This chapter is concerned with the analysis and interpretation of the data gathered through the data collecting instruments (quantitative online questionnaires answered by EFL teachers and students at Mohamed Bachir El Ibrahimi – BBA university). In this chapter we will deal with the analysis of the teachers and students questionnaires that were described previously. The findings are presented using tables and figures for clarity followed by a discussion of their implication in relation to the research questions. This analysis provides the foundation for the conclusion and recommendations.

## 1. The analysis of the data

### 1.1 The analysis of students' questionnaire

#### 1.1.1 Section 1: Students Background

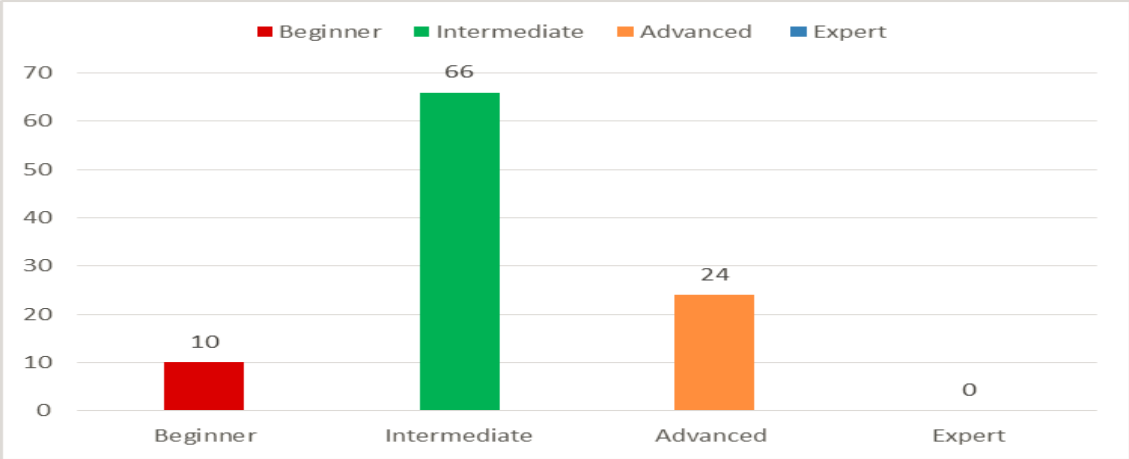
**First question:** Did you have any experience with AI-Grammar checking tools before starting your dissertation?

Answer	Frequency	Percent
Yes	60	60%
No	40	40%
Total	100	100%

**Table 2:** Experience with AI Grammar Checkers before Starting Dissertation

The first question aims to identify if master two students had any experience with AI- grammar checker tools before conducting their research studies. The result indicate that out of 60% of master two students answered with yes and this actually proved that they have a previous experience with AI – Grammar Checker Tools before even conducting their dissertation; however, 40% of them, answered with No which demonstrated their unfamiliarity with these tools. From the results, we can say that the majority of the students were familiar with these tools. As a result, there is a possibility of using these tools in their dissertation.

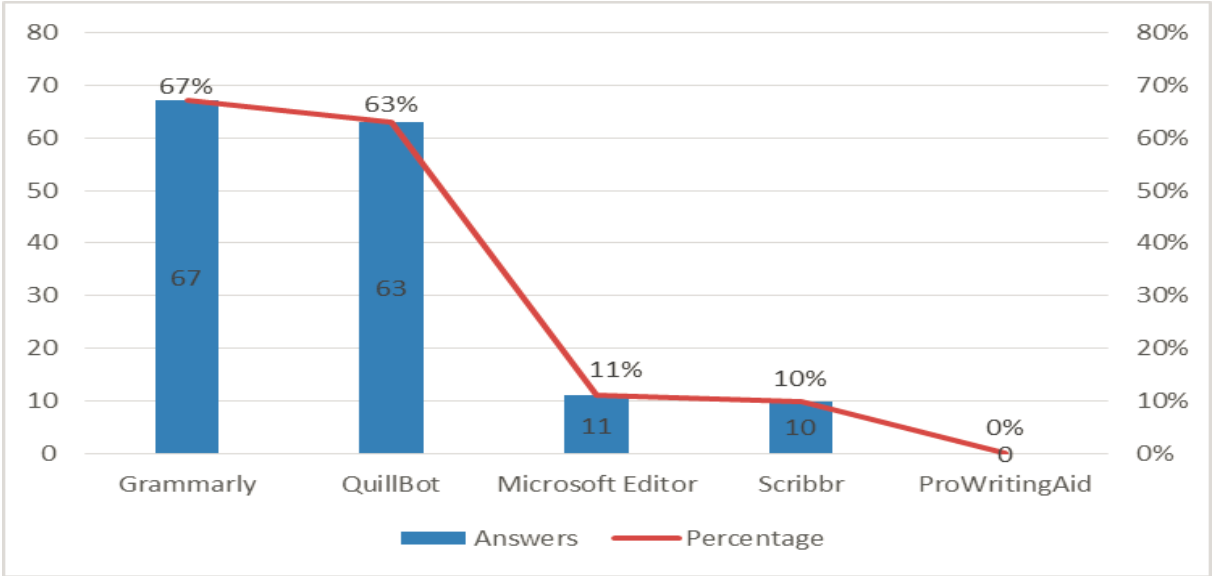
**Second question:** How would you rate your proficiency in academic writing?



**Figure 7:** Students Level in Academic Writing

This question provided four answer options: beginner, intermediate, advanced, and expert. The students rated their own level by selecting one. The results revealed that 66% of the students rated themselves as intermediate level, while 24 % selected advanced that represent the third option and 10 % of respondents selected beginner level. This may indicate that there is a gap in their knowledge. Notably, no students selected the expert level 0%. Based on the previous analysis, we can see that there is a possibility that beginners use these tools to support their lack of knowledge in their dissertation. The same applies for the 66% of intermediate student; they may also utilize these tools to expand their gaps in their dissertation to ensure their research.

**Third question:** which AI- grammar checker tools are you familiar with (choose one or more options).

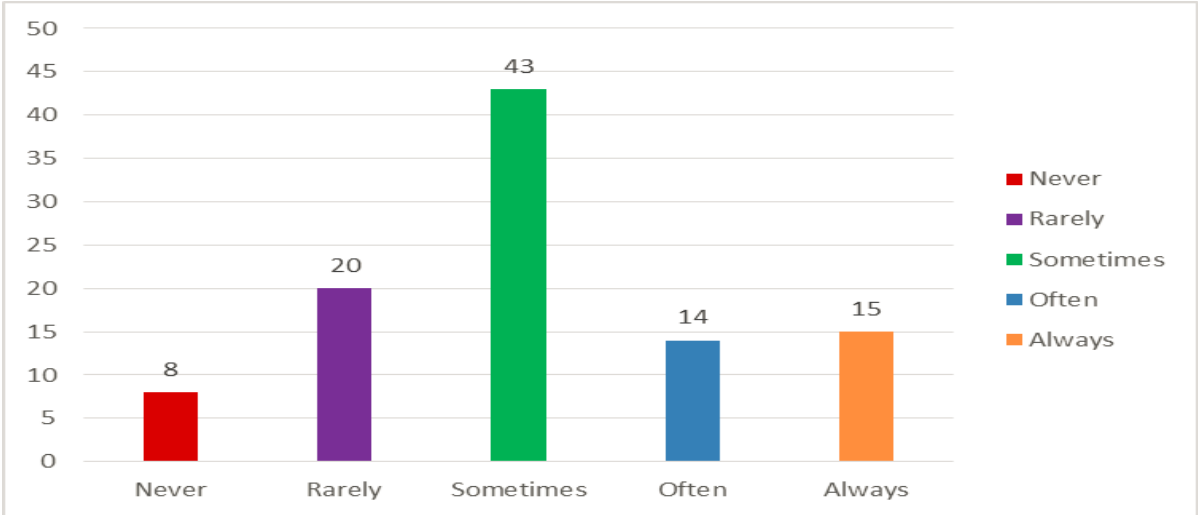


**Figure 8:** Familiarity with AI Grammar-Checking Tools

Since students had a prior experience with AI-grammar checking tools, we utilized this question in order to know which of these tools they were familiar with. According to the result shown in the bar chart, Grammarly is the most recognized AI grammar checker, with **67 (67%)** of respondents being familiar with it, representing the majority of participant. The second most familiar tool was QuillBot follow closely Grammarly with **63 (63%)** of respondents. The least familiar tools were Microsoft Editor **11 (11%)** and Scribber **10 (10%)** which have the lowest familiarity level. Lastly, students were not familiar with ProWritingAid, which ends with zero responses as a result for it.

**1.1.2 Section 2: Students’ Willingness to Use Grammar-Checking Tools in Dissertation Writing**

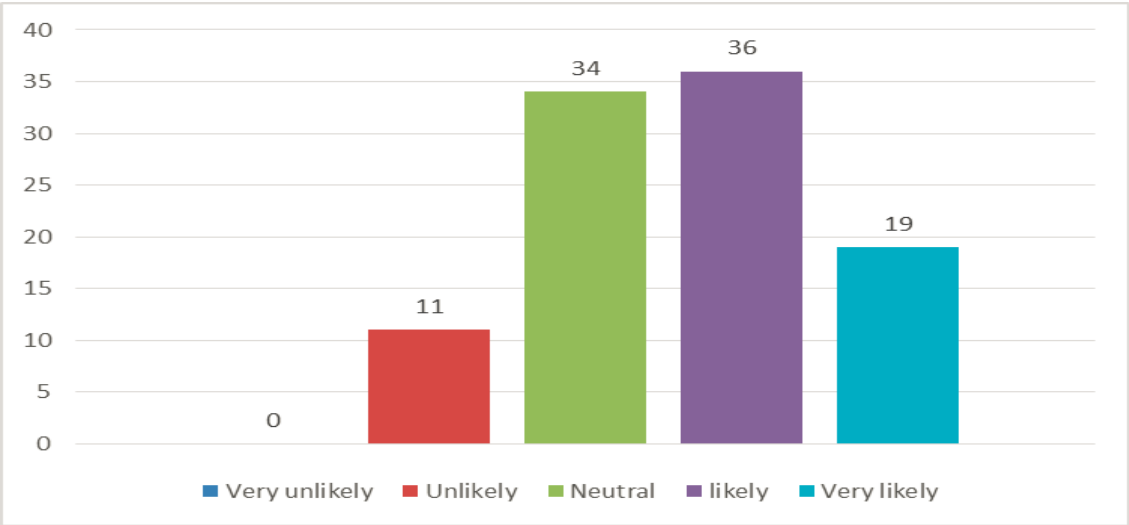
**Question 1:** How often you use grammar-checking tools when writing your dissertation?



**Figure 9:** Grammar-Checker Usage Patterns in Dissertation Writing

According to the bar chart above, the statistics indicated that the majority of students use grammar checker tools sometimes, and this was represented with 43 answers (43%). While a group of students, 29 students (14 answered with "often" and 15 answered with "always"). Moreover, the result showed also a low frequency of use of grammar checker tools, with a small group represented by 20 answers for "rarely" and 8 answers for "never."

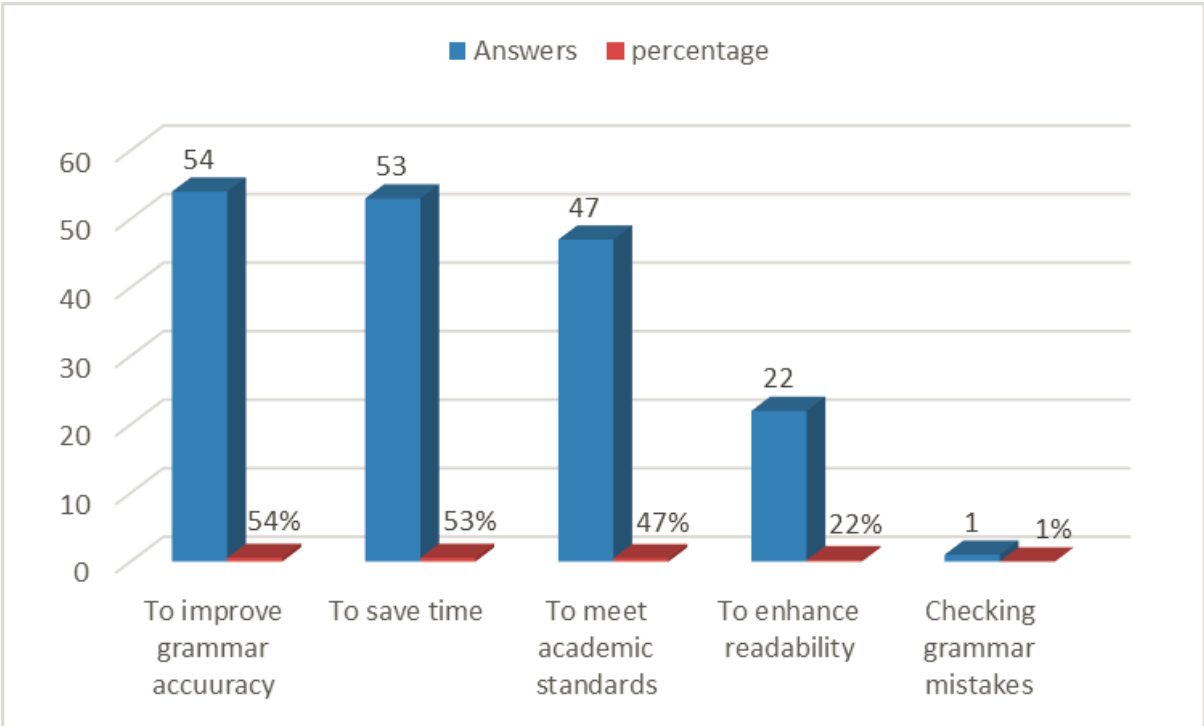
**Question 2:** How likely are you to use grammar-checking tools for your dissertation?



**Figure 10:** Student Likelihood of Using Grammar-Checking Tools for Dissertation Writing

Based on the results that represented in the bar chart above, the majority of students 36 (36%) answered that they are likely to use AI grammar checking tools, followed with 19 students (19%) who are very likely to use it.. However, 34% remained neutral , while 11 % answered that they were unlikely to use these tools in their dissertation.

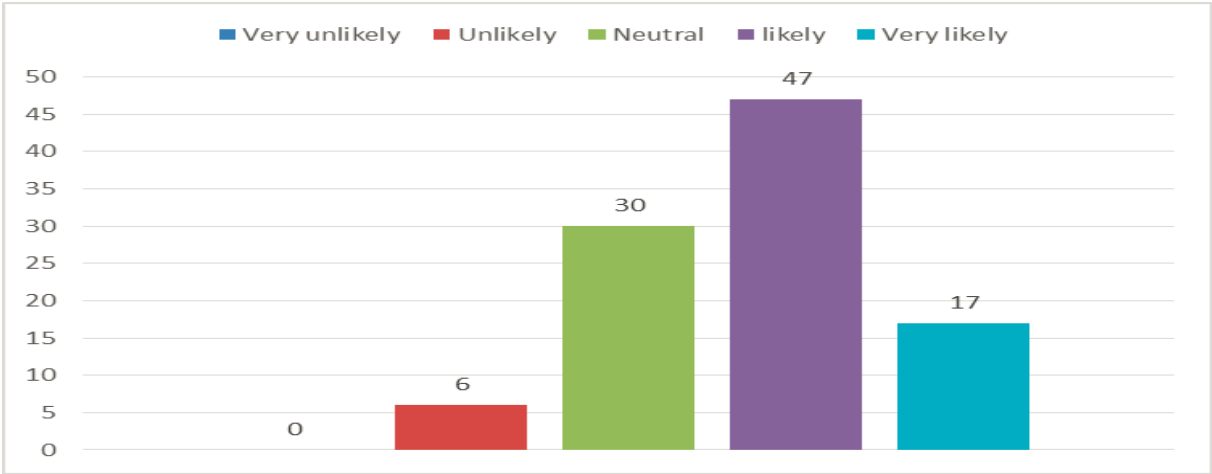
**Question 3:** What is your primary reason for using grammar-checking tools?



**Figure 11:** Primary Reasons for Using Grammar-Checking Tools

According to the bar chart above which focuses on the primary reason for using grammar-checking tools, the majority of students (54 answers;54%) use it to improve grammar accuracy followed by 53 respondents (53%) who use it to save time. Moreover 47 students (47%) use the grammar checker tools to meet academic standards, while a small group of students represented with 23% (23 answers) use these tools as way to enhance their readability and checking their mistakes.

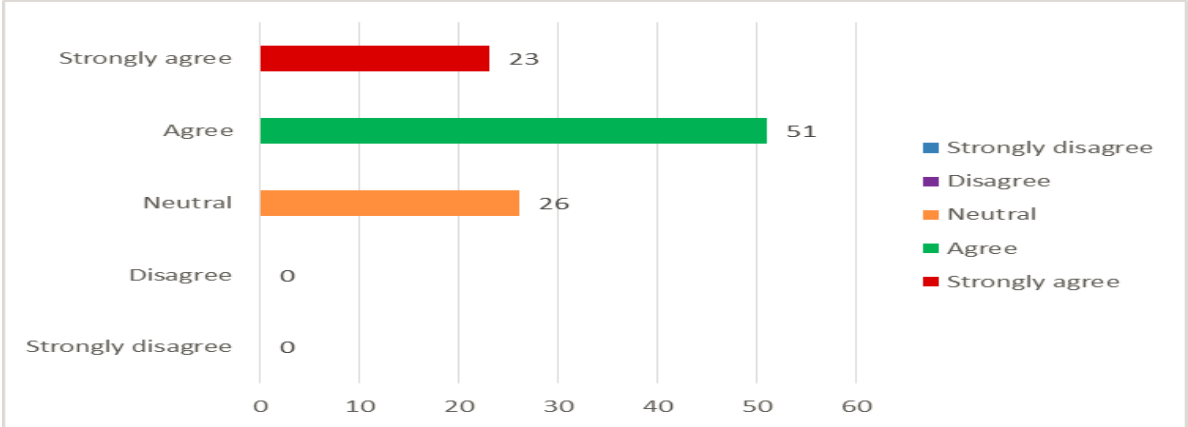
**Question 4:** How likely are you to recommend grammar-checking tools to other students?



**Figure 12:** Student Recommendations for Grammar-Checking Tools

Based on the graph, the results revealed that 47% are likely to recommend grammar-checking tools to other students, followed by 17% who are very likely to do so. On the contrary, 30% remained neutral, while 6% answered that they are unlikely to recommend these tools to other students.

**Question 5:** Do you believe grammar-checking tools are essential for writing a dissertation?

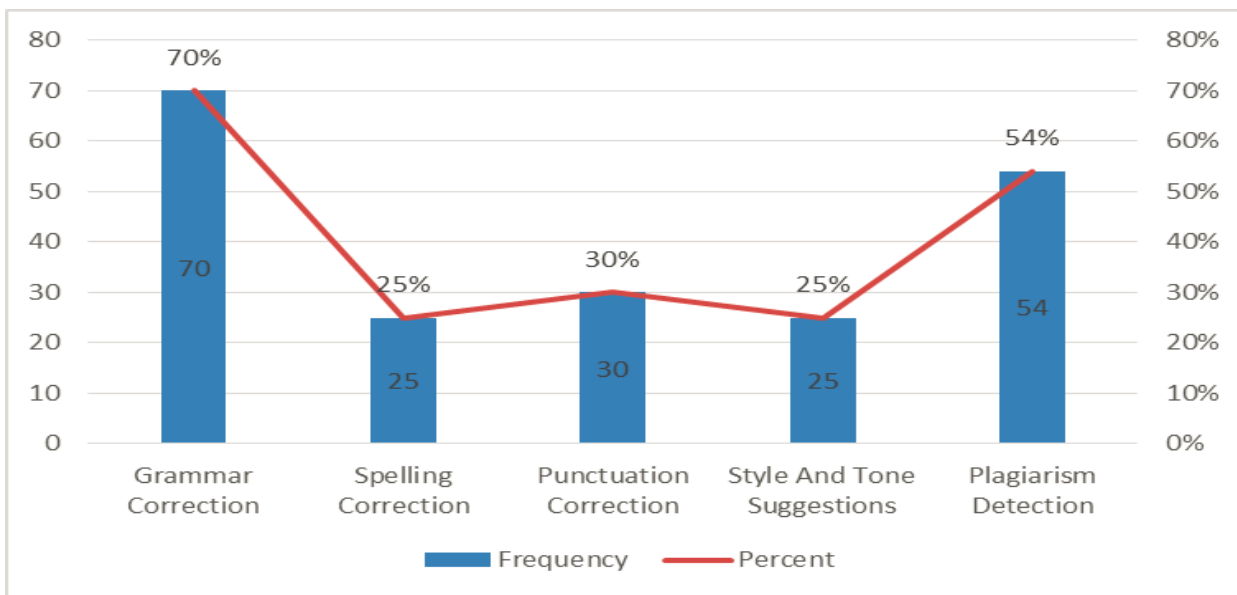


**Figure 13:** Essentiality of Grammar Tools in Dissertation Writing

Based on the results that indicated in the Bar chart, 51 of students (51%) agreed that AI Grammar checking tools are crucial and helpful in their dissertation, followed by 23 of students (23%) strongly agree and believe that grammar checker tools are essential for writing a dissertation. While 26 of students (26%) remained neutral, no student selected the choices *disagree* and *strongly disagree*.

### 1.1.3 Section 3: Most Frequently Used Features of Grammar-Checking Tools

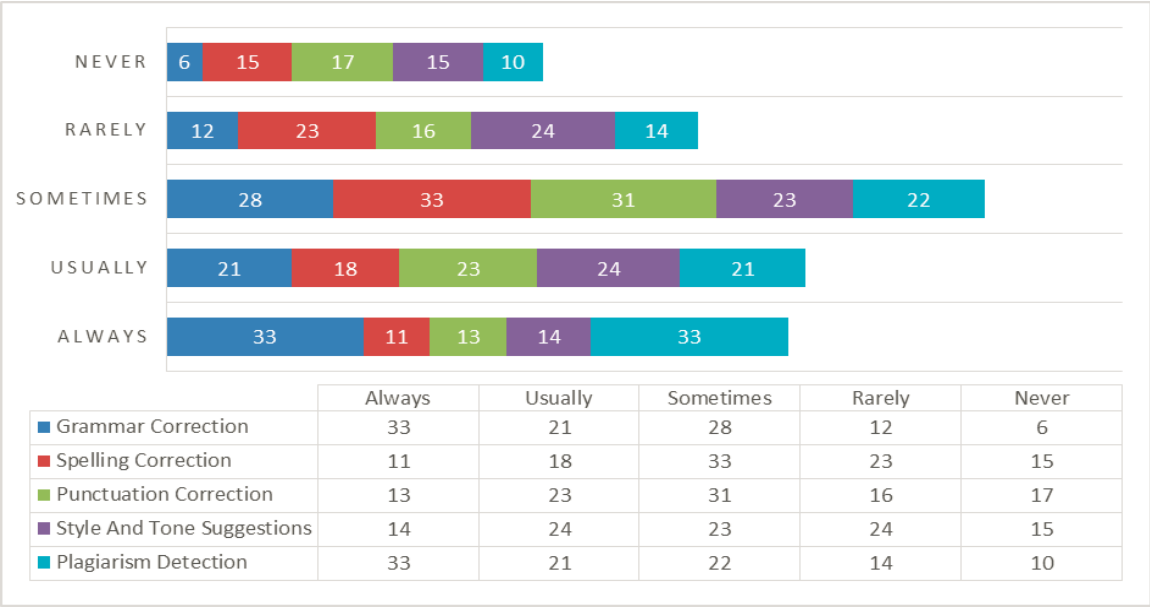
**Question 1:** Which of the following grammar checking tool features do you use most frequently? (Choose one or more options)



**Figure 14:** Most Frequently Used Features of Grammar-Checking Tools

According to the bar chart and the table, 70 respondents (**70%**) of Master Two Students tend to use AI- grammar checking tools for grammar correction; this proves their lack of knowledge in using the correct rules of grammar (forms) in writing. Using the tools for Plagiarism Detection came in the second place, represented by 54 respondents (**54%**) which is an indicator that students may be relying too much on these tools, and their work may not be original. However, 30 respondents (**30%**) use AI- tools to correct the punctuation, while 25 respondents (**25%**) use them for both spelling correction, style and tone suggestions.

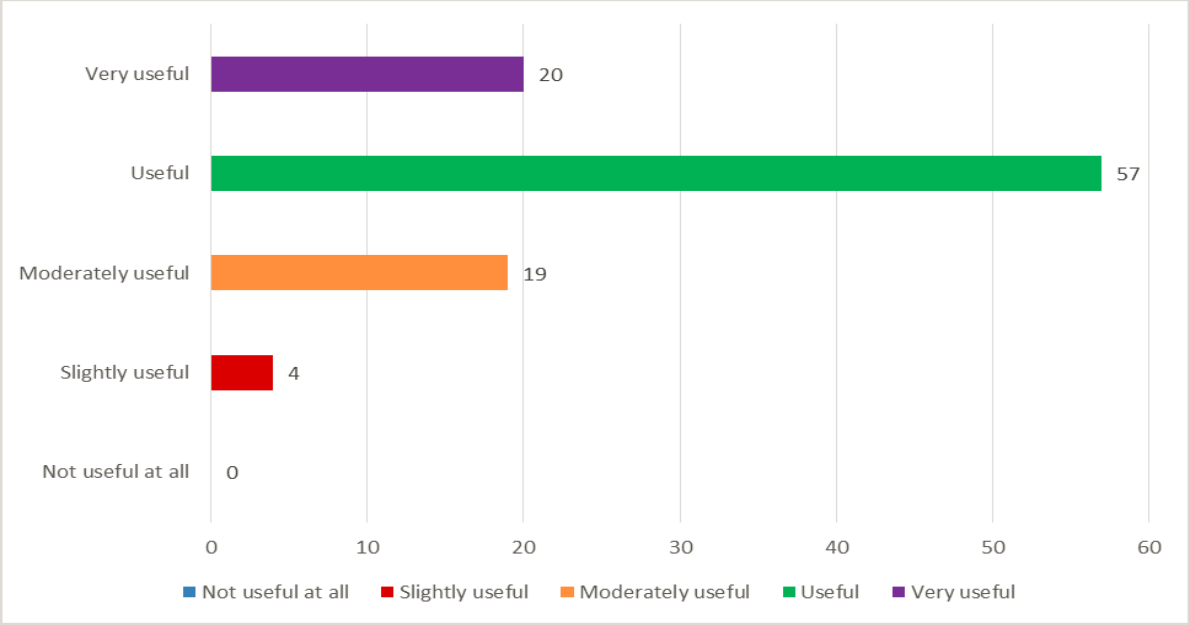
**Question 2:** In the table below, classify the following AI grammar-checking tools features according to your use.



**Figure 15:** How often Students Use Different AI Grammar-checker Features

The graph and the table show the frequency of AI grammar-checking tools usage across five categories: grammar correction, spelling correction, punctuation correction, style and tone suggestions, and plagiarism detection and how often people use the different features of AI grammar-checking tools. According to the data displayed in the graph and table, grammar correction and plagiarism detection are the most frequently used features, with **33 participants** reporting "Always", suggesting a strong confidence on these tools. Spelling Correction has the lowest "Always" usage, with only **11 students**, but a relatively high "Sometimes" usage by **33 participants**. Punctuation correction is used "Usually" by **23 students**, but the majority, **31 students**, use it only "Sometimes." This shows that the tools are helpful for punctuation correction according to some students, but not essential for most of them. **Style and tone suggestions** show balanced but less consistent usage, with **24 students** each for "Usually" and "Rarely." As a result, students most frequently utilized features that related to grammar and plagiarism, while the other features like spelling, punctuation, and style and tone suggestions are adopted by students less frequently and less commonly, or only when required.

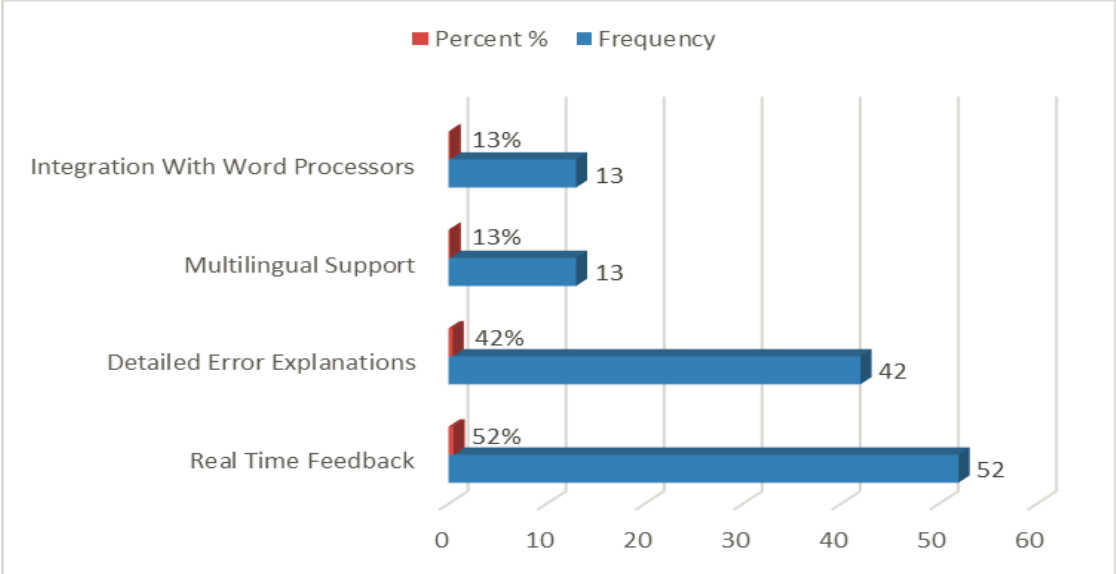
**Question 3:** How useful do you find the grammar correction feature?



**Figure 16:** Perceived Usefulness of Grammar Correction Features

The grammar correction feature is highly valued by 57 of respondents (57%) finding it useful, while 20 respondents (20%) consider it very useful reflecting strong user reliance and demonstrating widespread satisfaction with this tool. Nineteen respondents (19%) consider it moderately useful. Only a small fraction 4 (4%) view it as slightly useful indicating minimal dissatisfaction. However, no one selected that this feature is not useful at all, resulting in zero (0%) for that response.

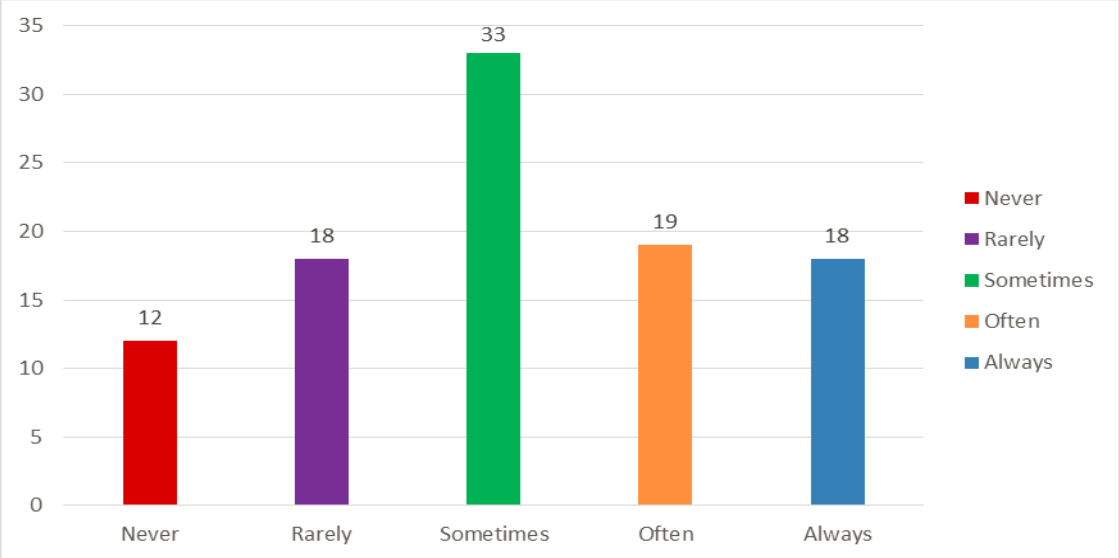
**Question 4:** Which feature do you consider the most important in a grammar-checking tool? (Choose only one option and if you selected other, please specify.)



**Figure 17:** Most Valued Features in Grammar-Checking Tools

Real-time feedback dominates as the most critical feature, chosen by 52 of respondents (52%), highlighting users' need for immediate corrections. Detailed error explanations follow closely at 42 (42%), showing strong demand for learning-oriented tools. Multilingual support and word processor integration tie at 13 (13%) for both, suggesting these are niche rather than essential requirements. The overwhelming preference for real-time feedback suggests users prioritize efficiency over in-depth analysis. The minimal interest in multilingual features may reflect a primarily English-speaking user base. These results clearly indicate that speed and clarity are the top priorities for students in using grammar-checking tools.

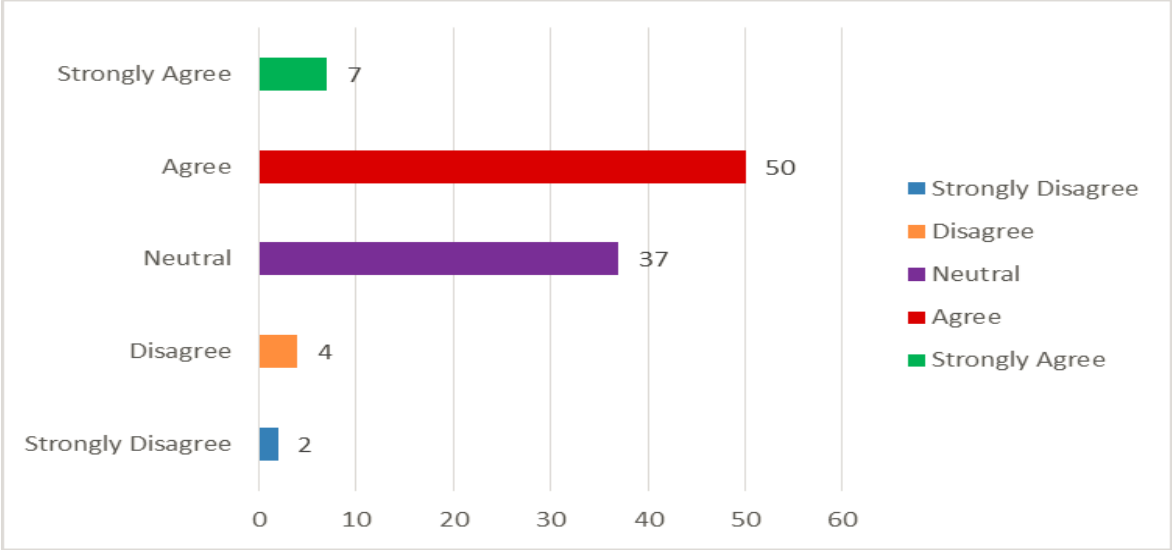
**Question 5:** How often do you use the plagiarism detection feature in grammar-checking tools?



**Figure 18:** Frequency of Plagiarism Detection Feature Usage

Plagiarism detection shows polarized usage, with 33 respondents (33%) using it sometimes, which represent the majority of students. While 19 respondents (19%) use them frequently. In the same line, 18 respondents (18%) of students always use this feature to check their work. However, the rest of students answered differently; 18 respondents (18 %) use it rarely, and 12 respondents (12%) never use it at all. Through this result, plagiarism detection feature appears commonly used by students but not everyone relies on it.

**Question 6:** Do you find the style and tone suggestions provided by grammar checking tools helpful?

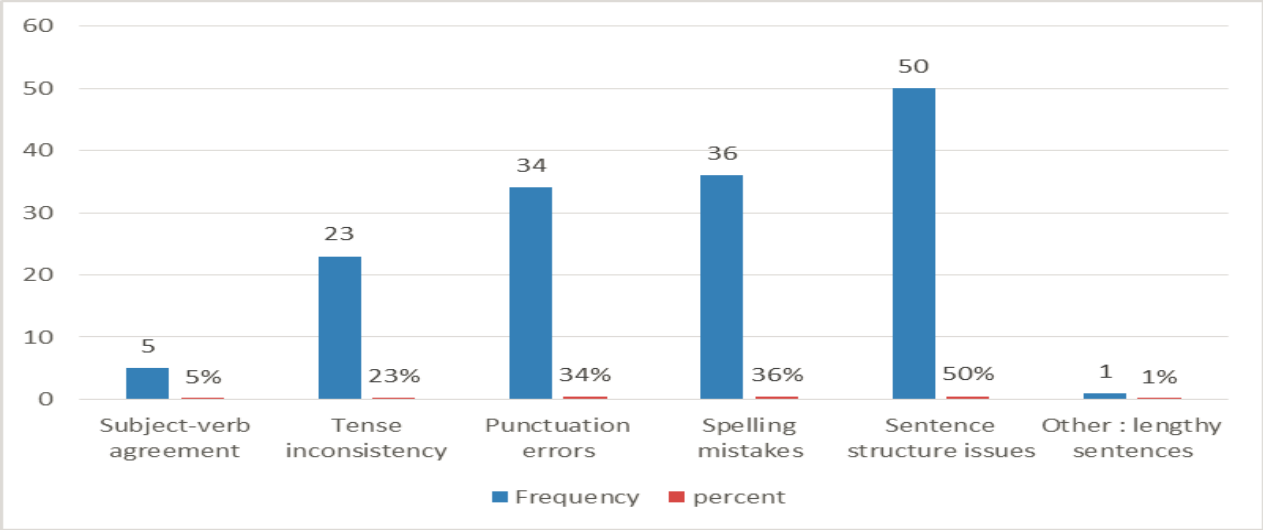


**Figure 19:** Students’ Perceptions on Whether Style/Tone Feedback Improves their Writing

The style and tone suggestions receive mixed reactions; fifty respondents (50%) expressed their agreement in using this feature while only seven (7%) chose strongly agree. While a notable, 37 respondents (37%) remain neutral, suggesting uncertainty about the feature's value, four (4%) disagree, and two (2%) strongly disagree, finding that this feature unhelpful. Overall, these results reflect that students’ dependency on this tool varies.

**1.1.4 Section 4: Types of Errors Corrected Using Grammar-Checking Tools**

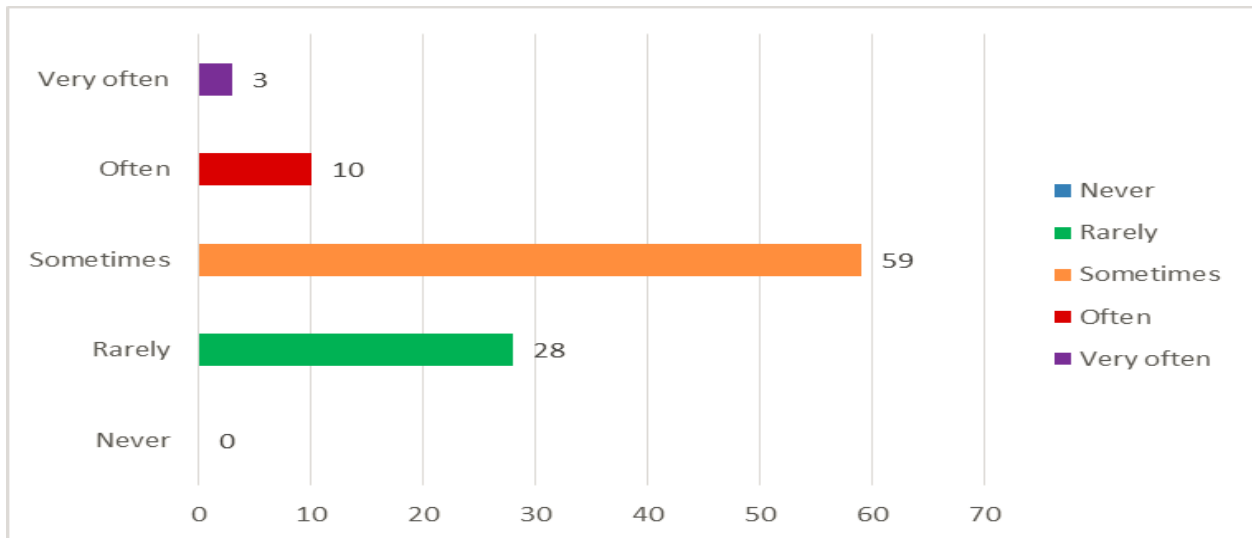
**Question 1:** Which of the following errors do you make most frequently in your writing? (If you selected other, please specify.)



**Figure 20:** Most Common Writing Errors among Students

The survey results reveals that the most common writing error is sentence structure with 50 respondents (**50%**), followed by spelling mistakes with 36 respondents (**36%**) and punctuation errors with 34 (**34%**). A less frequent error is tense inconsistency, represented by 23 respondents (**23%**). However, five respondents (**5%**) reported struggles with subject-verb agreement 5%, while one respondent (**1%**) selected other, specifically lengthy sentences. Notably, half of the participants 50% selected the choice of sentence structure issues.

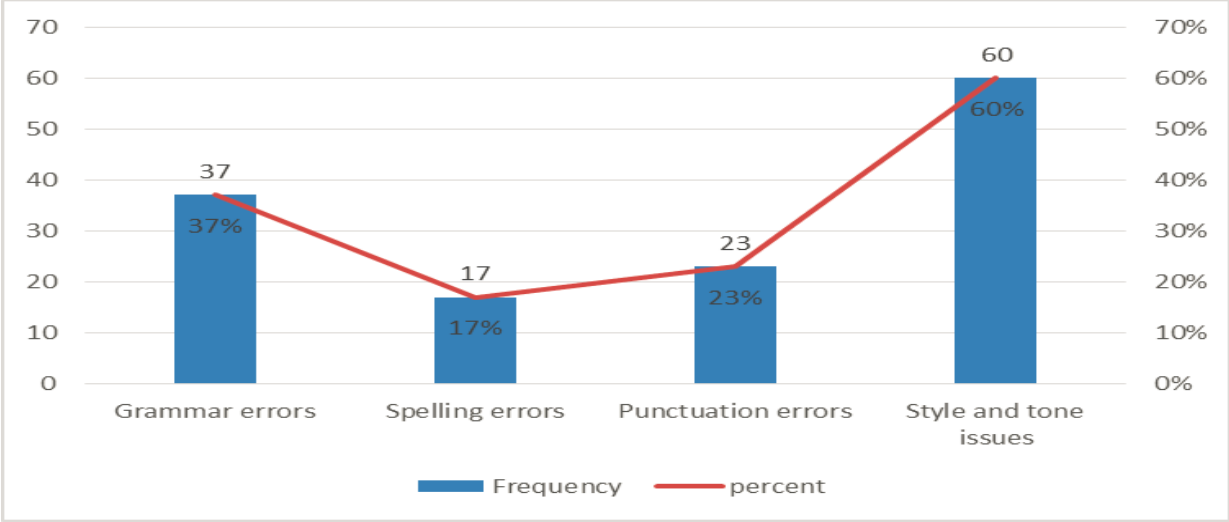
**Question 2:** How often do you make grammar errors in your dissertation?



**Figure 21:** Frequency of Self-Reported Grammar Errors in Dissertations

According to results represented in the pie chart and the table, most students (**59%**) stated that they sometimes make grammar errors in their dissertation. While 28 of students (**28%**) rarely make errors in grammar, followed by 10 students (**10%**) who answered that they often make grammar errors, while three students (**3%**) make them very often. On the contrary, no student answered that they never make such errors, which means that all students make grammar errors in their dissertation with, but varying degrees.

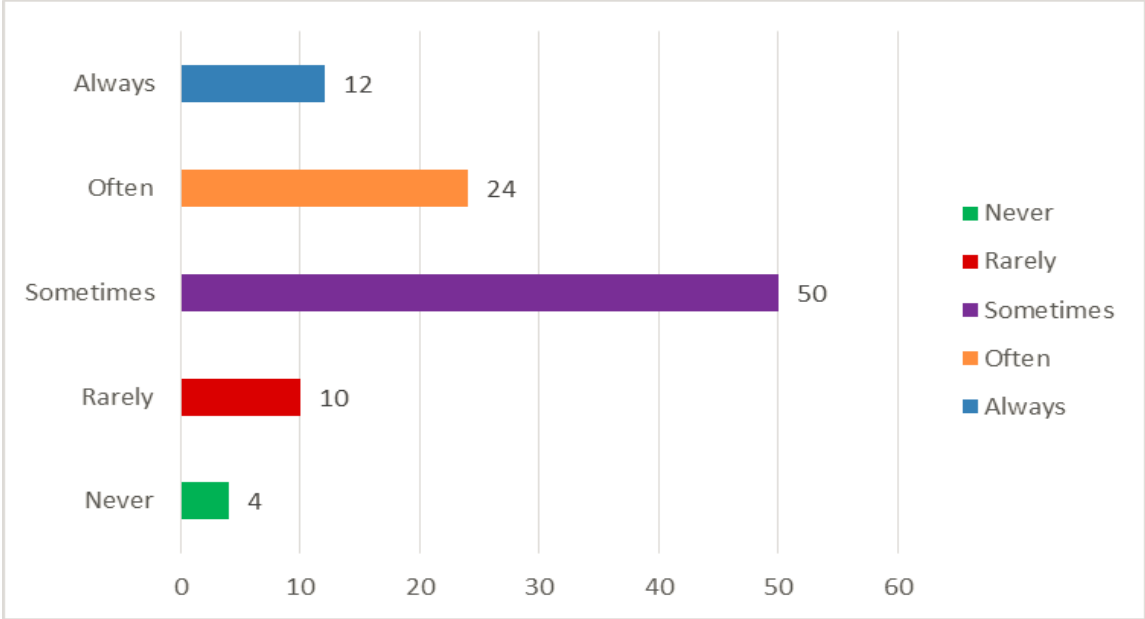
**Question 3:** Which type of error do you find most challenging to correct? (Choose one or more options)



**Figure 22:** Most Challenging Grammar Errors to Correct

The survey results highlight the challenges writers face when correcting different types of errors in their work. In this regard, 60 respondents (60%) found issues with style and tone, followed by 37 students (37%) who chose the option of grammar errors. Moreover, 23 students (23%) find that punctuation errors are the most challenging, while only 17 (17%) chose spelling errors.

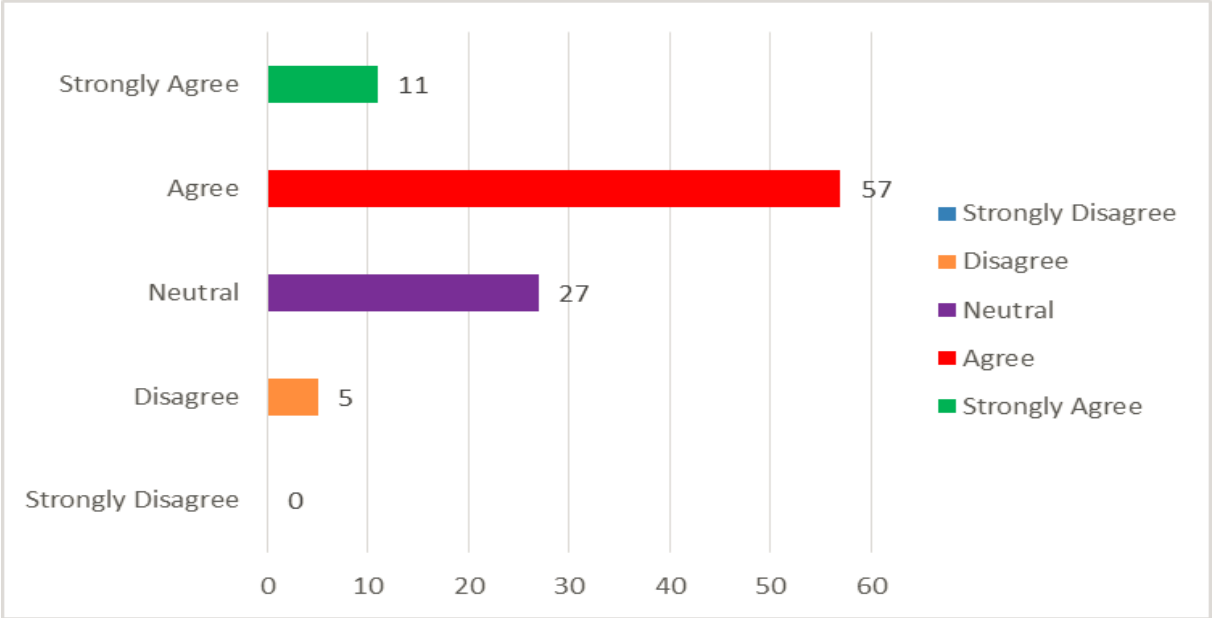
**Question 4:** How often do you rely on grammar-checking tools to identify errors in your writing?



**Figure 23:** Frequency of Grammar-Checking Tool Reliance for Error Detection

The survey results reveal varied reliance on grammar-checking tools among respondents. Out of 100 respondents, 50 participants (50%) reported using these tools sometimes, which indicate a moderate but not constant dependence. In addition, 24 of respondents (24%) turn to grammar checkers "often," demonstrating regular use. Only 12 students (12%) admitted to choose the option "always" relying on these tools, while 10 students (10%) rarely use them and four students (4%) answered that they never use them. While complete dependence remains uncommon, the majority of students use them only for aid without overreliance.

**Question 5:** Do you think grammar-checking tools effectively identify your most common errors?

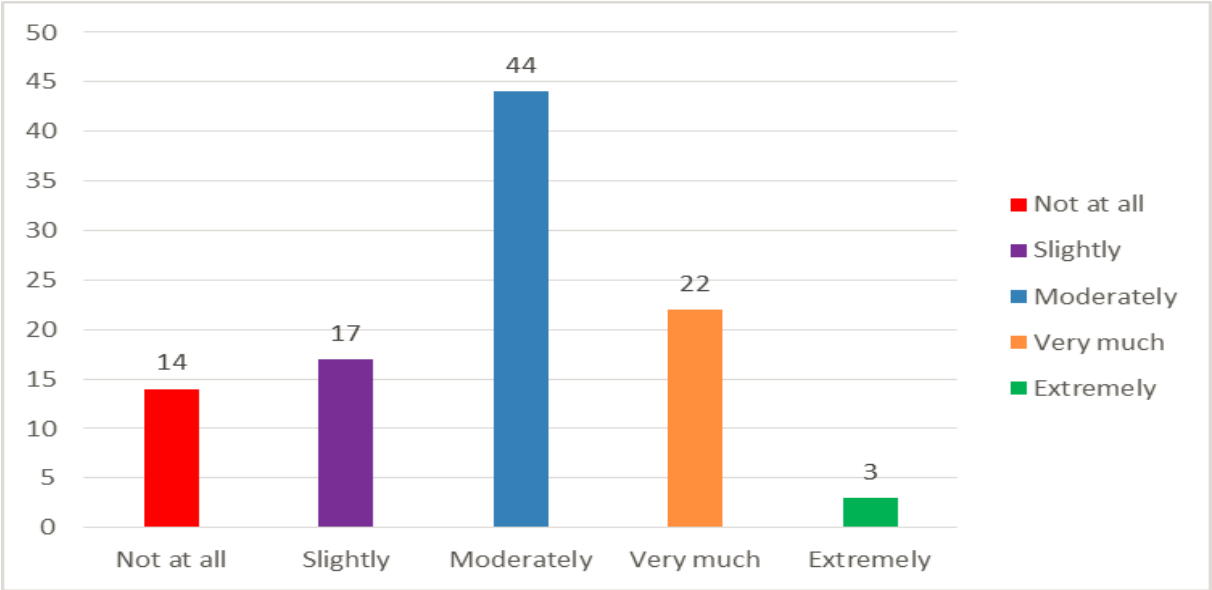


**Figure 24:** Perceived Effectiveness of Grammar Checkers for Common Errors

The survey reveals divided opinions about the effectiveness of grammar-checking tools. A majority of respondents 57% (57 respondents) expressed agreement that these tools successfully identify their most common errors, and only 11 % (11 respondents) strongly agreed. However, a notable portion 27% (27respondents) remained neutral, possibly indicating uncertainty or mixed experiences. A smaller group of five students (5%) disagreed with the tools' effectiveness. while 0% strongly disagreed it.

**1.1.5 Section 5: Factors Influencing the Adoption of Grammar-Checking Tools**

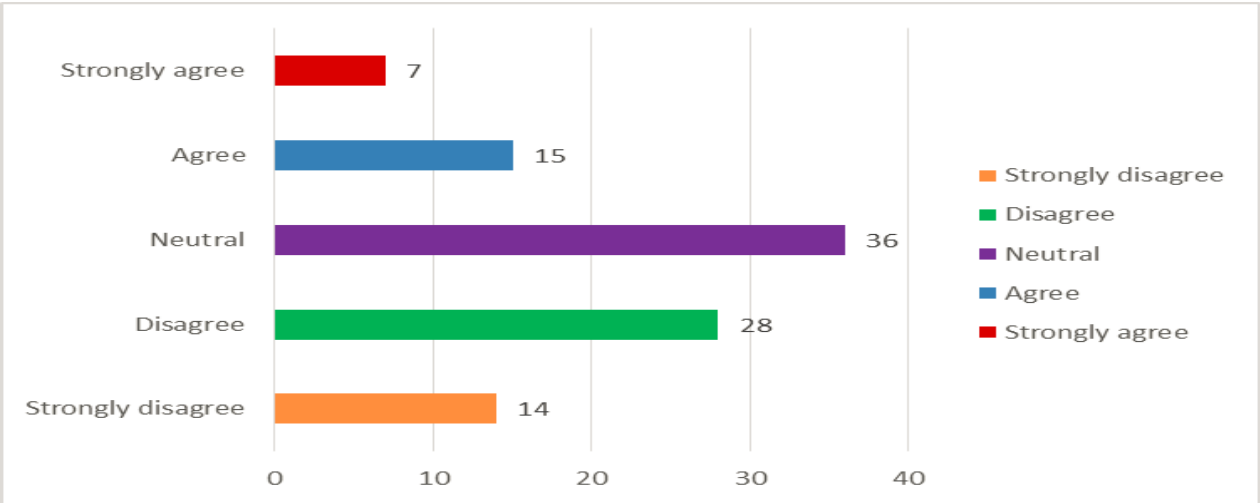
**Question 1:** To what extent do ethical concerns (e.g. plagiarism, overreliance...) discourage you from using these tools in your writing?



**Figure 25:** Impact of Ethical Concerns on Grammar-Checker Usage

The results shown in the pie chart reveals that 44 of students (44%) moderately discouraged by ethical concerns when using these tools in their writing, while 22 students (22%) were very much discouraged from these concerns. However, 17 respondents (17%) reported being slightly discouraged. In addition, 14 of students (14%) admitted that they were not discouraged at all. Only three students (3%) were frustrated from it while using these Ai tools.

**Question 2:** To what extent do you agree or disagree with banning the use of AI writing tools (e.g. ChatGPT) for graded assignments in universities?



**Figure 26:** Student Attitudes toward Banning AI Writing Tools in Graded Assignments

The survey results reveal a divided stance on banning AI writing tools like ChatGPT for graded university assignments. A combined 42% of the respondents oppose the ban of AI writing tools, with 14% strongly disagreeing (14 students) and 28% disagreeing (28 students), indicating strong resistance from the participants. However, 36% remain neutral (36 students), likely undecided or indifferent. Conversely, 22% supported the ban of these tools, split between 15% strongly agreeing (15 students), and 7% agreeing (seven students).

**Question 3: To what extent do you agree with the following statements?**

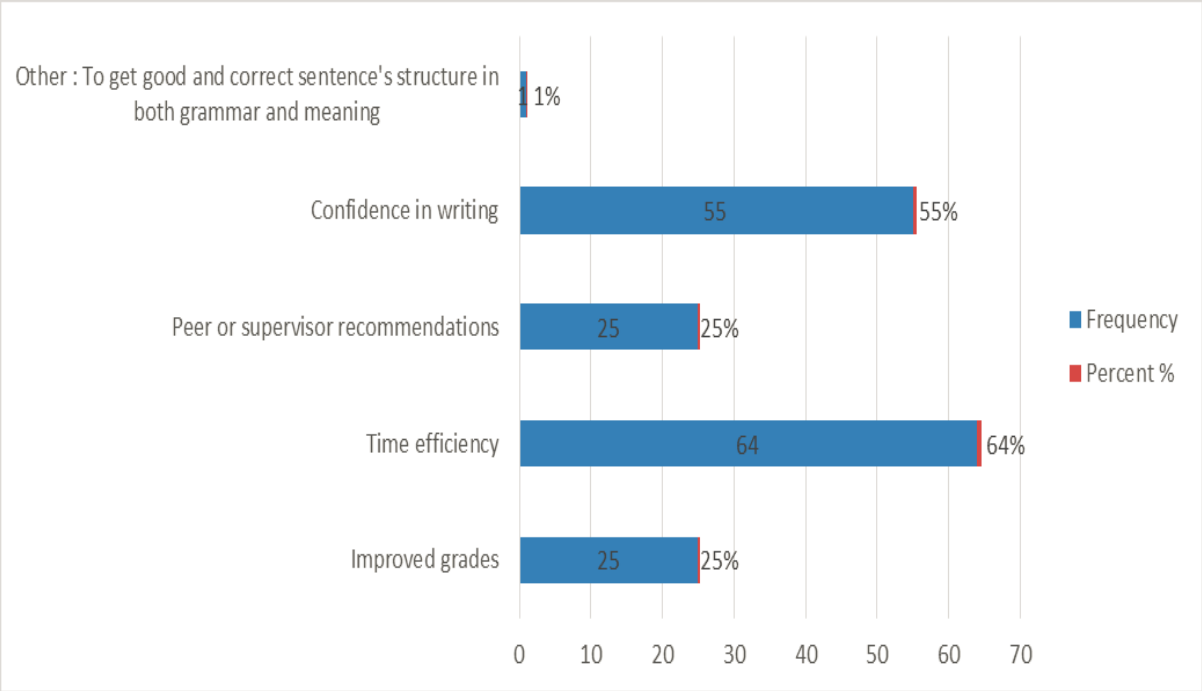
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AI writing tools help me improve my grammar more effectively than manual proofreading.	31	52	12	5	0
Using AI tools has helped me identify recurring mistakes in my writing.	35	55	7	1	2
I feel more confident in my writing skills after using AI assistance.	34	44	19	1	2
AI tools have expanded my vocabulary and improved my sentence structure.	38	45	14	1	2

**Table 2:** How Students Rate AI Writing Tools Benefits and Impacts

The data reveals **strong positive agreement** across all four statements; most respondents strongly agreed or agreed that AI tools improve grammar better than manual proofreading (**83% combined**). In addition, help identify recurring writing mistakes (**90% combined**). Moreover, boost confidence in writing skills (**78% combined**), and expand vocabulary and sentence structure (**83% combined**). In addition, based on the result the minority of the respondents, between 7 to 19 students depending on the statements, had a neutral stance on the benefits of AI writing tools. A small group between 0-5 students disagree or strongly disagree with these statements.

**Question 4:** What motivates you to use grammar-checking tools for your dissertation?

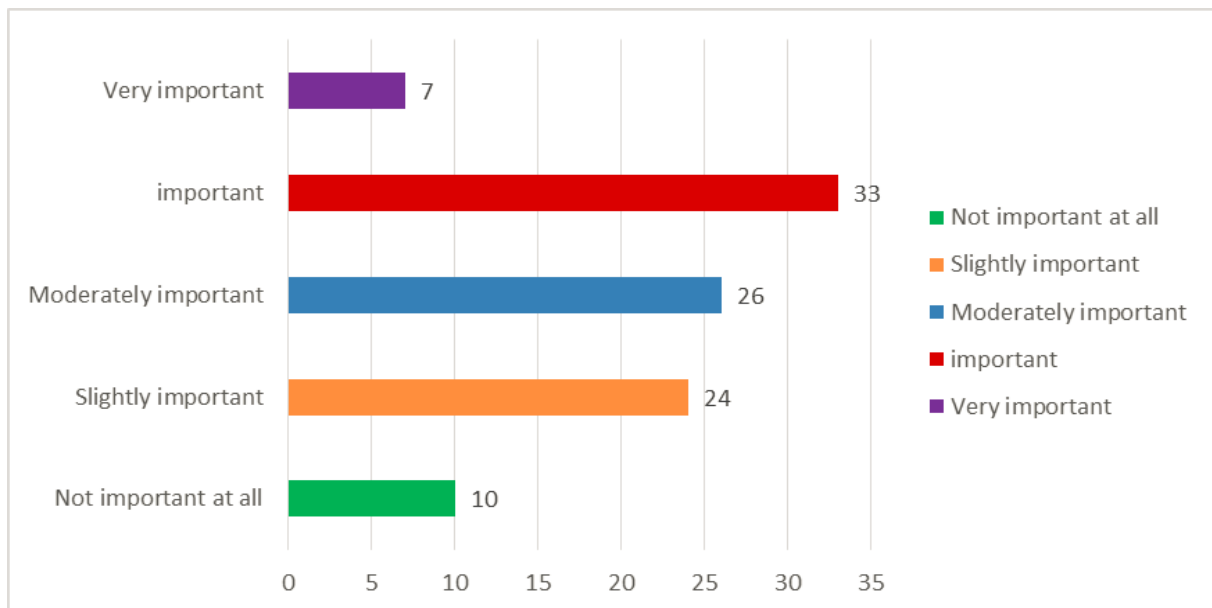
(Choose one or more options)



**Figure 27:** Key Motivations for Using Grammar-Checking Tools in Dissertation Writing

Based on the graph and the table, the results indicates that 64 of respondents (64%) use grammar-checking tools because of time efficiency while writing their dissertation, followed by 55 respondents (55%) who cited confidence in writing as a way of motivating students to use these tools. An equal frequency of 25 students (25%) used these tools as a motivation to improve their grades and peer or supervisor recommendations. However, one student (1%) specified that they use AI tools to correct sentence structure in both grammar, and meaning.

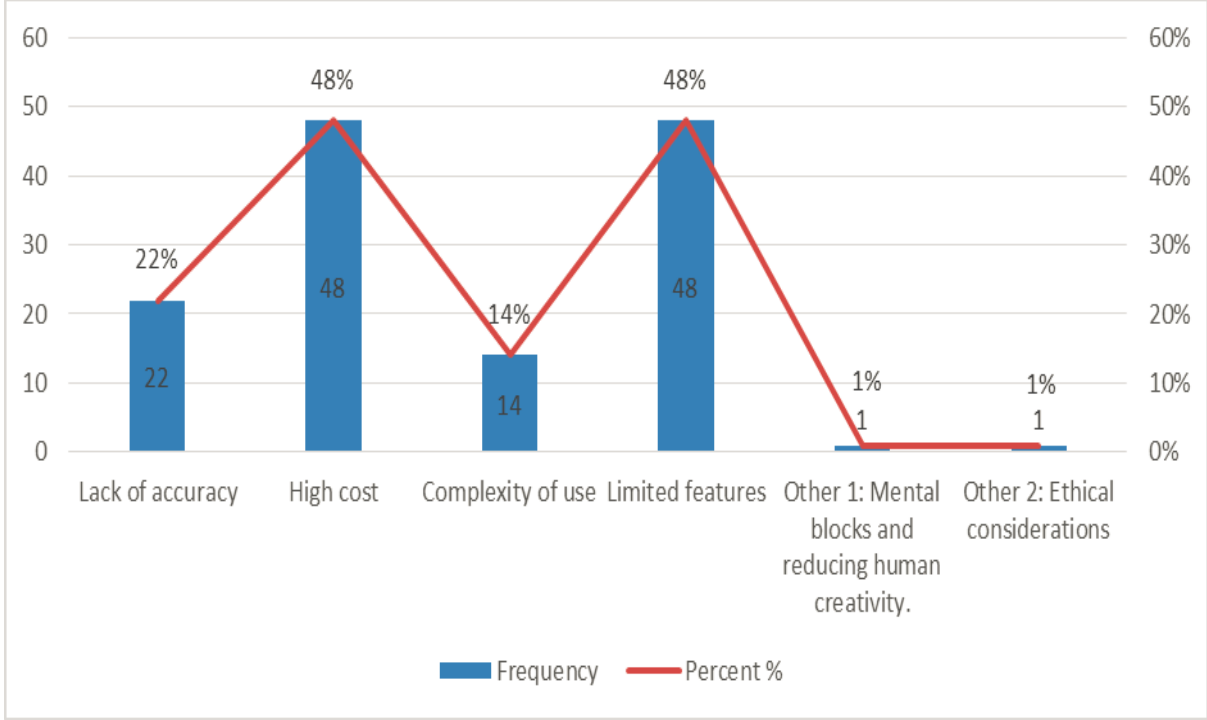
**Question 5:** How important is peer recommendation in your decision to use grammar-checking tools?



**Figure 28:** Impact of Peer Recommendations on Grammar-Checker Adoption

According to the results that shown in the pie chart and the table, 33 (33%) considered peer recommendation important in using these tools, followed by seven students (7%) who claimed that it is very important in concluding a decision whether to use these tools or not. while 26 respondents (26%) were moderately interested about peers' opinion, 24 students (24%) admitted that it is slightly important, and 10 students (10%) neglected the importance of peers opinion.

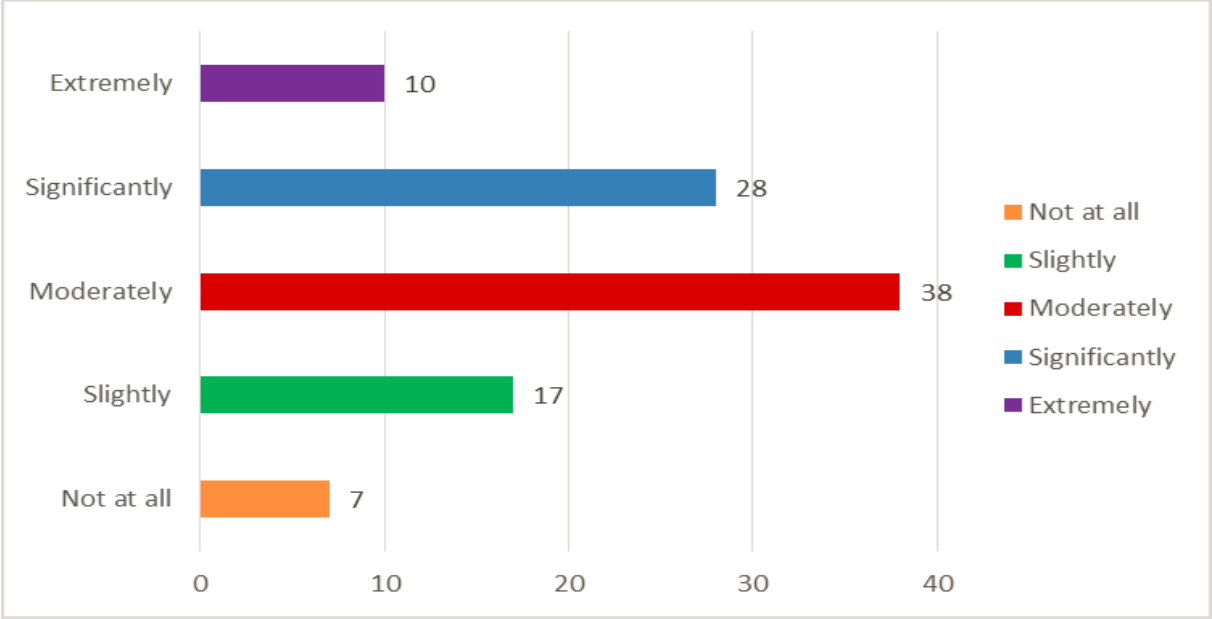
**Question 6:** Which of the following factors discourages you from using grammar-checking tools? (Choose one or more options)



**Figure 29:** Main factors that discourage students from using grammar checking

According to statistics presented in the bar chart and the table, high cost and limited features are the most significant factors that discouraged them from using grammar-checking tools, each selected by 48 of respondents (48%). The lack of accuracy was chosen by 42 students (42%) suggesting that that this factor discouraged them from using these tools. By contrast, 14 respondents (14%) were discouraged from complexity of use, and the rest 2% ( Two respondents) viewed that AI tools reduce human creativity, making students addicted to, and over-reliant on, these features, in addition to other factors such as ethical considerations.

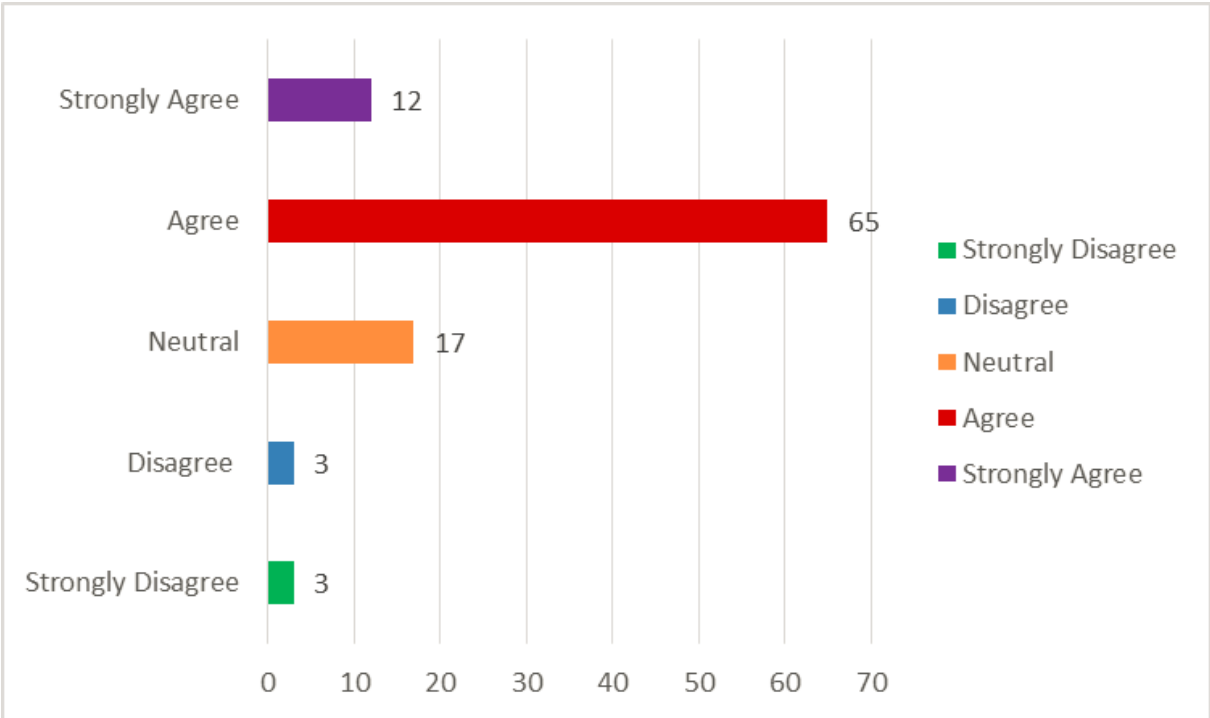
**Question 7:** How does the availability of free grammar-checking tools influence your decision to use them?



**Figure 30:** Impact of Free Access on Grammar-Checker Usage

The survey results highlight the significant impact of free grammar-checking tools on users' decisions to adopt them. A combined response (10% "Extremely" + 28% "Significantly") reported that cost-free access heavily influences their usage, underscoring the importance of affordability. Meanwhile, 38% stated it had a moderate influence, while 7% reported it had no influence at all. The rest of the students (17%) claimed that it had a slight influence. Overall, the data reveals that that majority prioritize free access.

**Question 8:** Do you believe using grammar-checking tools improves the quality of your dissertation?



**Figure 31:** Perceived Impact of Grammar Checkers on Dissertation Quality

Most of the students 65% believed that using grammar –checking tools improves the quality of their dissertation followed by 12% who strongly agreed, while 17 % remained neutral. However, 3% strongly disagreed with the possible impact of using these tools in their dissertation, and the other 3% disagreed claiming that AI tools are useless in dissertation writing.

## **1.2 The interpretation of students' questionnaire**

According to the statistics, most of the students 60% had a previous experience with AI grammar checker tools. 67% were familiar with Grammarly, and Quillbot 63%, whereas 11% with Microsoft edge. When we asked students to rate their level in academic writing, 66% reported to have an intermediate level, 24 % claimed to have an advanced level while 10% admitted to be beginners. This indicates that most of the students have not fully mastered academic writing, and still lack some kind of knowledge.

It appears that most of the students 72% use AI grammar checking tools in their dissertation, believing that they are important (74%), and useful (77%) in writing. As for the use, 86% rely on these tools to help them identify their errors. Notably 68% think that Ai tools can effectively identify their errors, while 65% agreed that AI tools improve the quality of dissertation. Moreover students were motivated to use these AI tools as they offered them time and efficiency (64%). As a result 64% encourage, and recommend other students to use them, whereas 90% reported ( 33% important, 26% moderately 24% slightly important , 7% very important ) that peer recommendation affect their decision to use these AI tools .

According to results, most of students use two features repeatedly, which are grammar correction, and plagiarism detection, demonstrating a lack of knowledge (grammar forms ...), and confidence, originality in their writing. As a result, they tend to use these tools to gain confidence, improve their writing, and avoid plagiarism. However other features were less critical such as ( punctuation correction , spelling correction , style and tone suggestion).

The most important feature in grammar checking tools were real time feedback 52%, and detailed error explanation 42%, which means that students tend to use these tools to compensate for what the teacher may not be able to do in class, either due lack of time, or the big number of students. In other words, the absence of immediate feedback and/or detailed explanation in the classroom may urge students to resort to AI tools.

All students make grammar errors in their dissertation to some extent, (59% sometimes, 10% often 28% rarely). Errors are of different types, and most errors that students commit are related to sentence structure 50%, spelling mistakes 36%, and punctuation errors 34%. other errors were less important. However , when it comes to the errors that students find challenging to correct, students were struggling to correct grammar errors 37% , style 60% and tone issues,

but students found that AI tools were helpful in providing suggestions for style and tone (50% agree, 37% neutral).

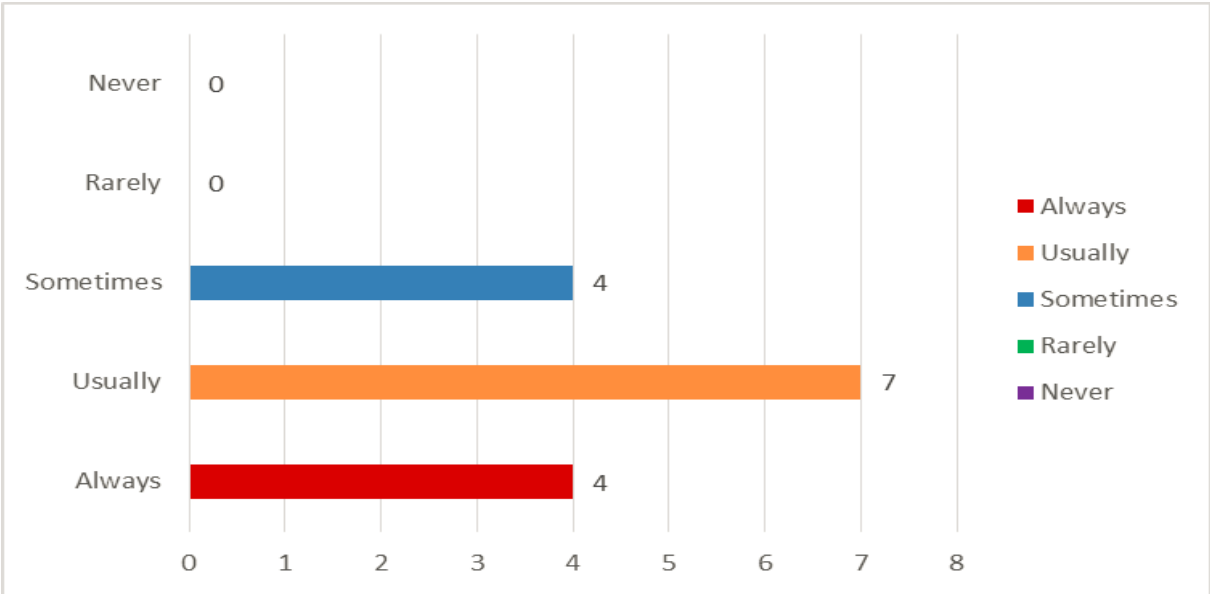
However most of the students 48% were discouraged due lack of features, and high cost in the first place while lack of accuracy, complexity of use, overreliance, reduced human creativity, and ethical consideration were less important. The results show that 42% of the students were against banning AI tools while 22% agreed and 36% remained neutral.

We can say that master two students over-rely on grammar checking tools, and they have a lack confidence in their writing abilities. Grammar errors were the most challenging problem for the them while writing. However, using plagiarism detector, indicate lack of creativity, and originality. Students are likely to use it to make sure they hid their weakness.

**2.1 The analyses of teachers’ questionnaire**

**2.1.1 Section 1 : Demographic and Contextuel Questions**

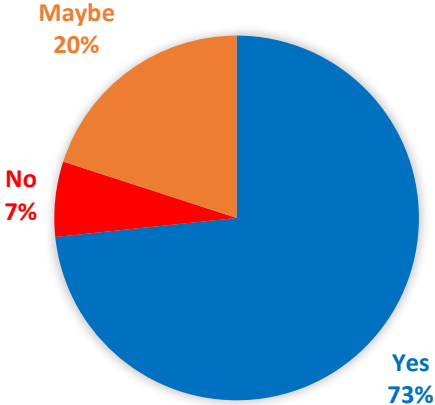
**Question 1:** How often do you incorporate technology into your teaching?



**Figure 32:** Frequency of Technology Integration in Teaching Practices

The first question seeks to find out how often teachers incorporate technology into their teaching. The results from figure 30 shown above revealed that the majority of the teachers (7 teachers representing 46% of the sample) use usually technology in their teaching process. The results show an equal number of 4 teachers in each category using technology in their teaching process either always or sometimes represented. Notably, none of the respondents selected never or rarely and that represents 0% for both of them, and this result shown that teachers integrate technology to some extent.

**Question 2:** As a teacher, do you support using grammar checker tools while writing dissertation?



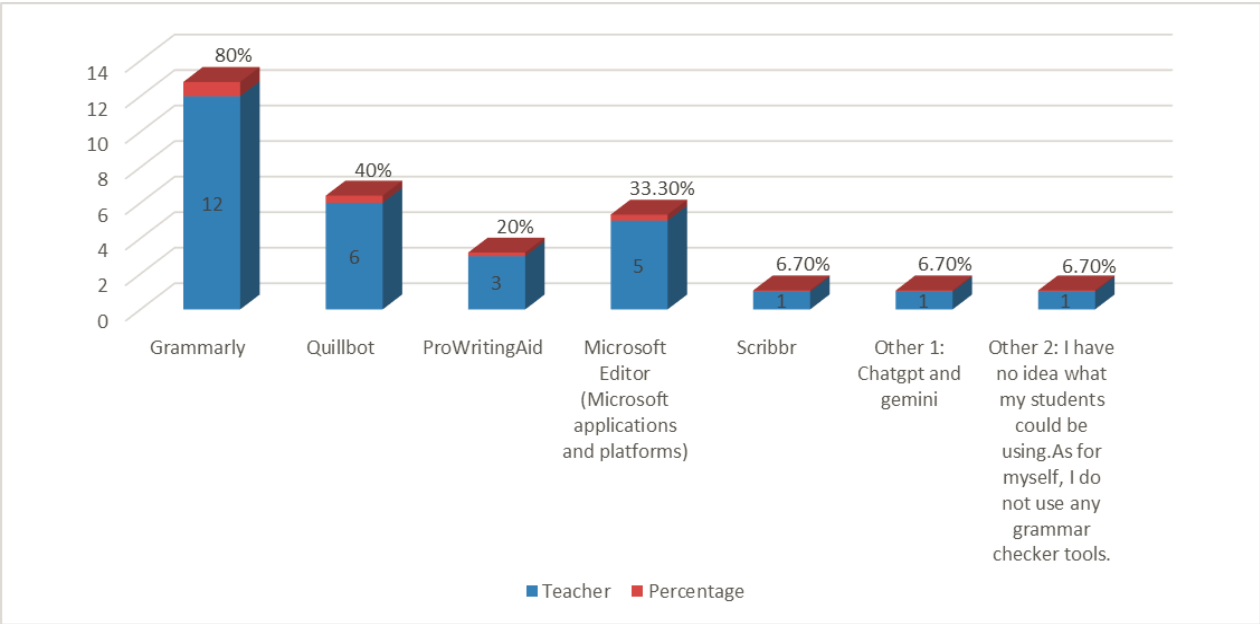
	Frequency	Percent
<b>Yes</b>	11	73%
<b>No</b>	1	7%
<b>Maybe</b>	3	20%
<b>Total</b>	15	100%

**Figure 33:** Teacher Support for Grammar-Checker Use in Dissertations

**Table 3:**Teacher Support for Grammar-Checker Use in Dissertations

The second question aimed to find out how many teachers support using grammar checking tools in writing dissertation. From the result presented in the pie chart (figure 31) and the table above indicates that the majority of teachers (11 out of 15 represented by 73%) answered with Yes showing strong support for these tools. Only one teacher (7%) opposed the idea of using these tools in dissertation, while three teachers selected maybe (20%) showing hesitation and doubts.

**Question 3:** Which AI grammar checker tools are you or your students familiar with?

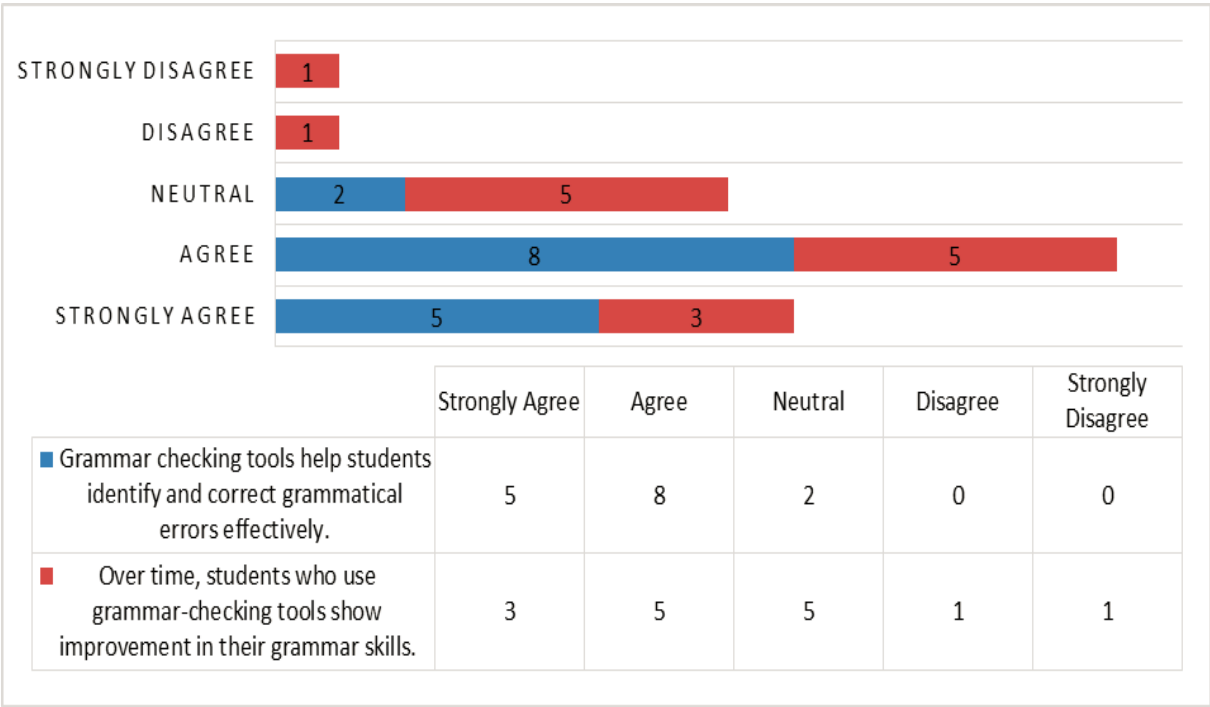


**Figure 34:** Familiarity with AI Grammar-Checker Tools among Teachers and Students

According to the information provided in Figure and the table above, the results show a clear difference familiarity with the AI Grammar checking tools among teachers. Based on the result, Grammarly is the most familiar grammar checker for teachers with 80%, and QuillBot being the second most known by 40 %, followed by Microsoft Editor (Microsoft applications and platforms) with 33.3 % . ProWritingAid is familiar to 20% of the informants. A few teachers use other tools like Scribber 6.7% or AI helpers (ChatGPT/Gemini) 6.7%, or they do not use any tool (one teacher) 6.7%.

**2.1.2 Section 2: Grammar Proficiency**

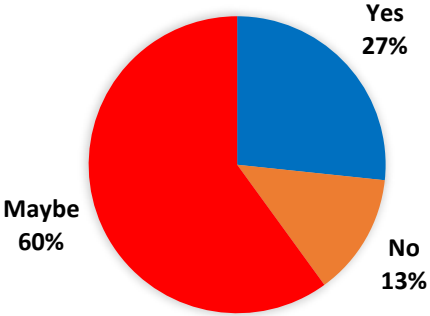
**Question 1:** To what extent do you agree with the following statement?



**Figure 35:** Teachers Views on Grammar Checkers

This question aimed to find out to what extent teachers agree with the two statement mentioned in the figure. The results revealed that most of the teachers (strongly agree 5 respondents + 8 agree) believe that grammar checking tools help students identify and correct grammar errors while 2 teachers were neutral, and none disagreed. When we asked teachers whether the students who use grammar checker tools show improvements in their grammar and writing skills, 8 teachers (5 teachers agree + 3 teachers strongly agree) respond with Yes to this idea, while 5 teachers chose to be neutral, and 2 of them (1 teacher disagree + 1 teacher strongly disagree) disagreed with this idea.

**Question 3:** Do you think students become overly reliant on grammar-checking tools and fail to learn grammar rules independently?



Answer	Teacher	Percent
Yes	4	27%
No	2	13%
Maybe	9	60%
Total	15	100%

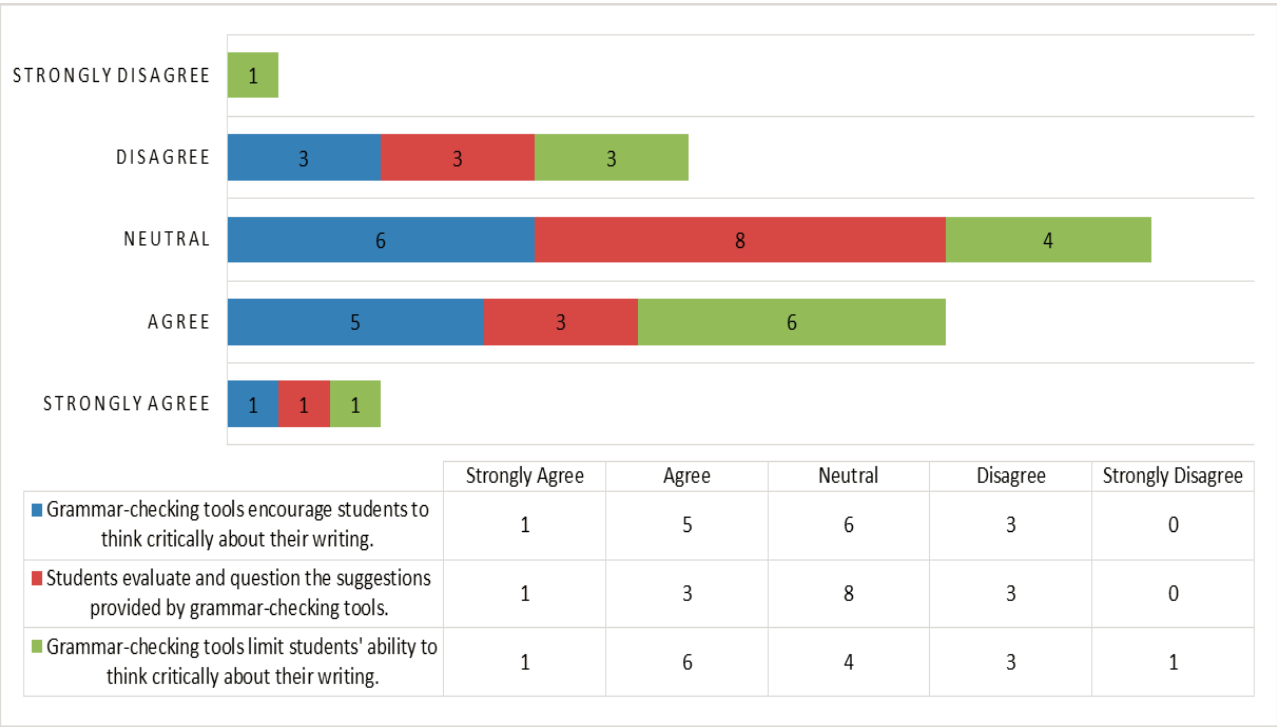
**Figure 36:** Teacher Concerns about Grammar-Checker Overreliance

**Table 4:** Teacher Concerns about Grammar-Checker Overreliance

The result indicated in figure and table above showed that teachers’ opinions are split on whether students depend too much on grammar checkers instead of learning the rules themselves. The majority of teachers (9 teacher represent 60%) are unsure if students rely too much on using grammar-checking tools. While 27% of the teachers (4 respondents) noticed students’ over-reliance with this tools. Only 13% (2 teachers) disagreed.

**2.1.3 Section 3: Critical Thinking**

**Question 1:** How strongly do you agree or disagree with the following statement?

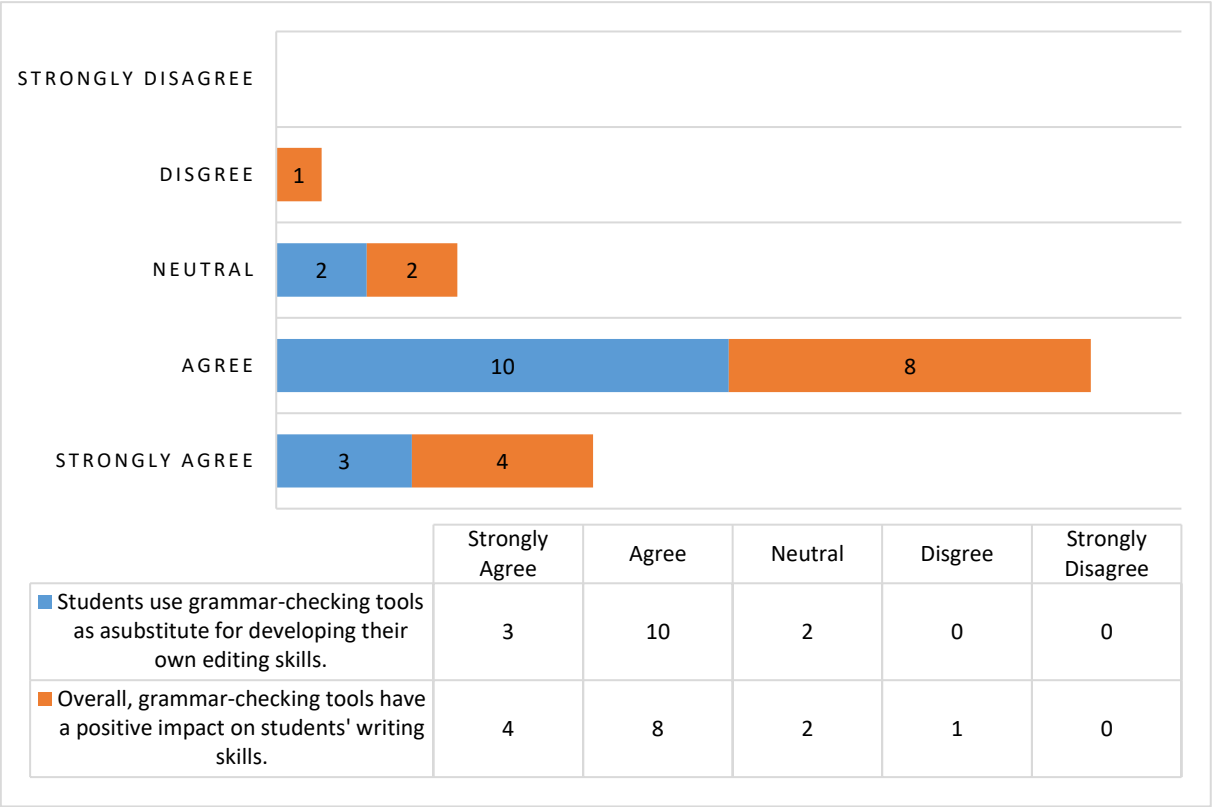


**Figure 37:** Teachers Views on Grammar-Checkers and Critical Thinking

For the first statement, which questions whether grammar checker tools encourage critical thinking, the result showed a balance between teachers who agree ( 1 strongly agree + 5 agree ) and those who are neutral (6 teachers), while 3 teachers disagree with this idea and none sleeted strongly disagree. In the second statement, which is about students questioning grammar tools suggestions, the majority of the respondents (8 teachers) chose to be neutral. This means that they are unsure whether students actually think about the tools suggestions, while 4 teachers (1 strongly agree + 3 agree) think that students check these suggestions, and only 3 teachers said that they do not. In the third statement, which focuses on the idea that grammar tools limit critical thinking, the result showed that the majority of teachers agree (1 strongly agree + 6 agree) and 4 teachers were unsure, while 4 teachers disagree (3 disagree + 1 strongly disagree). This means that many teachers think that these tools make students lazy, but others do not think it is a problem.

**2.1.4 Section 4: Skill Development**

**Question 1:** How much do you agree or disagree with the following statement?

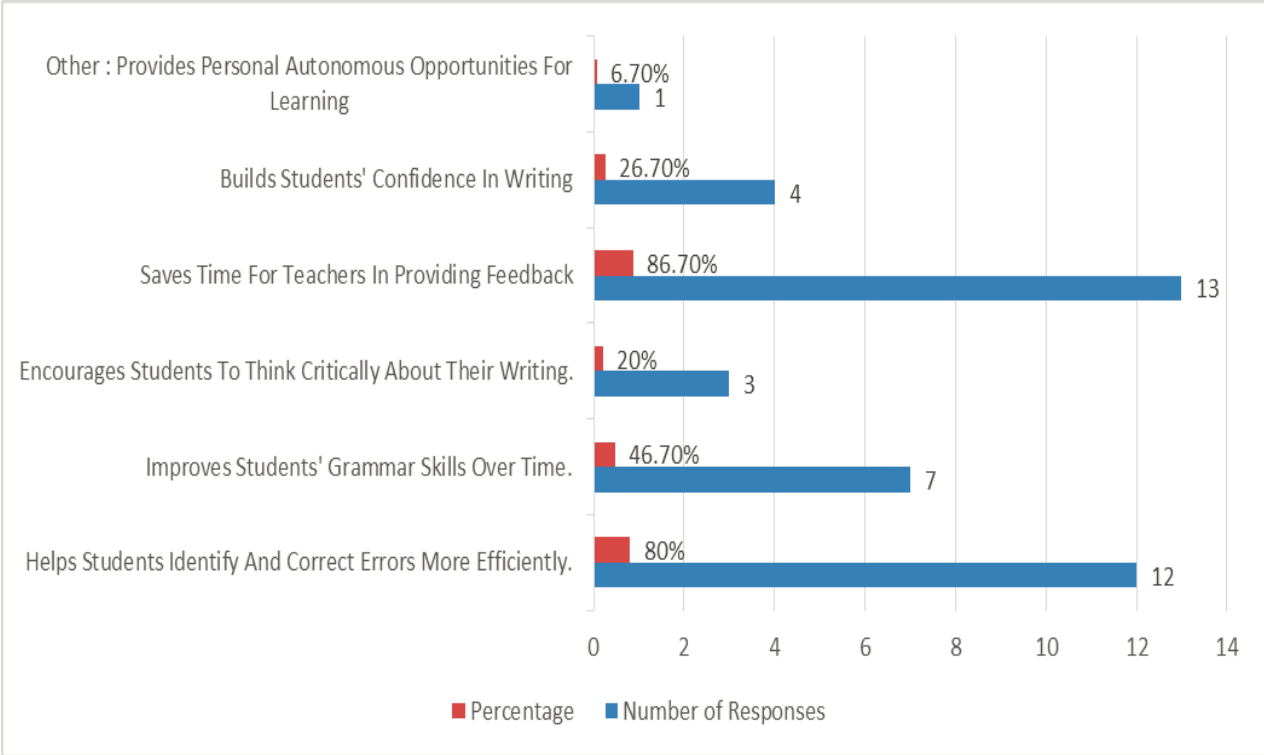


**Figure 38:** Do Grammar Tools Help Students Learn?

The outcomes of graph above show the extent to which teachers agree or disagree with two statements about grammar checking tools. For the first statement, which focuses on students’ use of grammar checker tools as substitute for developing their own editing skills, the result revealed that most of the respondents voted for the agreement with this idea, representing 13 respondents (3 strongly agree + 10 agree). The rest were split between 2 neutral responses and no disagreements. This means that most of the student rely on these tools instead of developing their own skills. In the second statement that focuses on whether grammar checker tools have a positive impact on students writing skills, the result showed that the majority of teachers believe that grammar checking tools have a positive impact on students’ writing skills, while 2 chose to be neutral and only 1 disagreed with this idea. This result represented how these tools are useful to develop students writing skills.

**2.1.5 Section 5: Benefits and Challenges of Grammar-Checking Tools in EFL Classrooms**

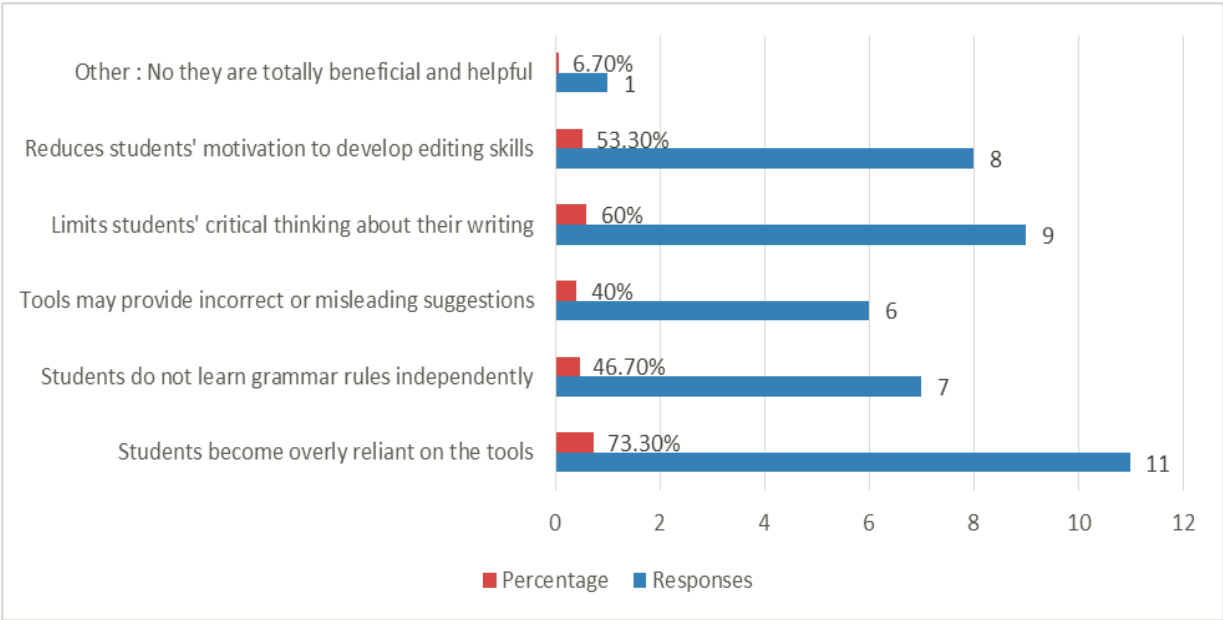
**Question 1:** What do you see as the main benefits of using grammar-checking tools in the classroom? (If you chose other, please specify)



**Figure 39: Why Teachers Use Grammar Checkers**

According to the result from the figure and the table above about the perceived benefits of AI writing tools, the most cited benefit was saving time for teachers in providing feedback with 86.7%. Close behind, 80% the of respondents see that grammar-checking tools help students with error identification and correction. Another 46.7 of respondents indicated that grammar checker tools help students develop grammatical abilities over the time. Other benefits are less frequently mention but still significant include building students confidence in writing (26.7%) and encourage students critical thinking (20%). Only one response added another benefit which is about providing personal autonomous opportunities for learning, represented by 6.7%.

**Question 2:** What challenges or drawbacks have you observed when students use grammar-checking tools? (If you chose other, please specify)



**Figure 40:** Common Problems When Students Use Grammar Checkers

According to the findings provided in Figure and the table above, the result revealed several significant challenges or drawbacks that come with the use of grammar checking tools. The majority of teachers voted for students becoming overly reliant on these tools as the major drawback, with 11 respondents represented with the highest percentage (73.3%). Additionally, 60% of the teachers noted that such tools limit students’ critical thinking about their writing. Furthermore, 53.3% of the participants indicated that these tools reduce students’ motivation to develop their editing skills. Another issue is that 46.7% of the respondents agree that students do not learn grammar rules because they rely on quick fixes using grammar checker tools, followed by 40% of the teachers emphasizing that these tools are not always accurate and may provide incorrect or misleading suggestions. Only one teacher (6.7%) argued that these tools are purely helpful.

## **2. The interpretation of teachers' questionnaire**

According to statistics, all teachers 100% reported that they use AI grammar checking tools in their teaching, as 86% agreed that they help them save time in terms of providing feedback. Most teachers were familiar with Grammarly 80%, Quilbot 40% in the first place, whereas Microsoft editor, was selected by 33% while Prowritingaid by 20%. In addition, 12 out of 15 teachers reported that using AI grammar checking tools helps students identify, and correct grammatical errors effectively. They believed that these AI tools have a positive impact on students' writing skills. Noticeably, most teachers claimed that students' grammar skills improved after using these tools, which 73% suggests, recommend students to use these tools in their writing. Based on teachers' perspectives (46%) students use AI tools to improve grammar skills overtime, and to build confidence in their writing while other issues were less selected like autonomy learning, or think critically. However, 60% of teachers were uncertain whether students could become over reliant in using these tools, 8 remained neutral as they were uncertain whether students evaluate, and question the suggestion provided by these AI tools. However, 13 teachers agreed that master two students are using these tools as a substitute rather than developing their editing skills, which means that students prefer convenience over developing their writing mechanics. In addition, 7 agreed that AI tools limit students' ability to think critically about their writing, and 11 teachers observed that students become over reliant on these tools. As a result, it limits students' critical thinking in their writing, and reduces their motivation to develop editing skills. Six Teachers stated that they do not use these AI tools to learn grammar rules independently, whereas 6 shed light on the possibility that AI tools can provide an incorrect, or misleading suggestion.

### 3. Discussion :

According to results about 72% of students use AI grammare checkeing tools in their dissertation, similarly, Aidi Wail Abdenmour & Smail Lilia (2024) study revealed, that 75% use AI tools in their writing as part of their academic journey routine . Based on the findings most utilized features is checking and correct grammar 70% , plagersim detection 54% spelling 25% ,and punctuation 30% . In parallel , in same study findings of aidi wail abdenmour & smail lilia (2024) reported that the primary use for these tools is to check grammar , spelling and punctuation 86.8% while 83.5% opted to utilized these Ai tools to correct their writing errors , followed by 31% used for plagiarism detection . Some of the difficulties that learners often encounter when they conduct a writing were sentence structure with 50 respondents (**50%**), followed by spelling mistakes with 36 respondents (**36%**) and punctuation errors with 34 (**34%**). A less frequent error is tense inconsistency, represented by 23 respondents (**23%**). However, five respondents (**5%**) reported struggles with subject-verb agreement 5%, while one respondent (**1%**) selected other, specifically lengthy sentences. Notably, half of the participants 50% selected the choice of sentence structure issues. According to the study of BOUIGHA Khalid & Namous Anis (2024) that the difficulties that learners often encounter when they conduct a writing activity were 39% lack of voucabulary , 11% punctuation , 2% spelling , 14% language structure , 4% grammar , 30% more then one difficulty . Time efficiency 64% 55% confidence in writing peer or supervisor recommendation 25% improve grades . students were motivated 64% time efficiency ,confidence in writing 55% peer recommendation , and improve grades with 25 % while in the study of Noudjoud Hassani & Meroua Aziz (2024) The responses are categorized as follows: (51,72%) believe that AI tools are beneficial because they provide a personalized learning experience. (34,84%) mentioned that AI tools are beneficial because they provide immediate 58 feedback. (13,79%) stated that AI tools enhance collaboration between students.

The questioner findings revealed that teachers had a positive impact on students writing skills. Many features were helpful such saving time in terms of providing feedback, helping students identify their errors and correct them effectively ... etc . Most of the teachers agreed to integrate these tools in teaching and recommend students to use it, however teachers agreed that students should not over rely on these tools , as it hinder their critical thinking , editing skills . Similarly Fatemeh Etaat (2024) shared the same point of view of the positive impact of these tools on students , and the danger of over-reliance on its . Almost same results were founded.

## **Conclusion**

The aim behind our investigation was to answer our research questions, and draw a conclusion about the use of AI grammar checking tools by students in writing their dissertations. From the questioners' results, we concluded that EFL mater 2 students were willing to use these AI tools in their dissertation, as they offered them all that was needed from immediate feedback, detailed explanation, saving time, confidence in their writing. To make sure that their dissertation was well articulated, they used these AI tools to identify, and correct their errors accurately. Most of them were struggling correcting with grammar errors, especially on level of sentence structure, spelling mistakes, and punctuation errors. Students believe that using these tools will have a positive impact on their writing. There were many common points between students, and teachers. Both believe that AI tools are crucial in learning, based the features provided. However, most of the teachers agreed that students may over-rely on these tools, and this can lead to undeveloped mental processes, such as critical thinking and editing skills (creativity).

## **Recommendations and suggestions**

### **1. For Teachers**

- Provide real time feedback if it is possible
- Teachers should make sure that they explain everything in detail, and facilitate learning
- Teachers should guide students on how to use these tools to get the maximum benefits
- Raise awareness to the danger of over-reliance on these tools
- Teachers must do their maximum to correct their grammatical errors, and at least reduce them.

### **2. For Students**

- Students must question the suggestions provided by these AI tools.
- Students must use AI tools as an aid to help them learn, not rely on them.
- Students must develop their creativity, originality, honesty in their writing by practicing to avoid plagiarism.
- Students should practice with teacher inside the classroom, and outside with AI tools.
- Students must be aware that AI tools serve as an assistant but it cannot replace teachers.

## **Future research**

For future research, researchers could expand the population and the sampling by including students from other universities. Moreover, they can focus on the impact of these tools on students' writing skills. Since our study used a quantitative approach, they can adopt a mix method or qualitative design for a comprehensive exploration of the topic.

## **General conclusion**

To conclude, this study was designed to investigate and analyse the use of grammar checker tools in writing dissertation, at Mohamed El Bachir El Ibrahimi University of Bordj Bou Arreridj. This study aimed to provide a statistical analysis of EFL master two students' frequency of use and common patterns of AI grammar checking tools application in dissertation. It also sought to assess teachers' perspectives on the impact of using these tools by students on their writing skills.

Therefore, we can conclude from the analysis of the collected data that both of the teachers and students recognise the benefits of AI grammar checking tools in identifying and correcting grammar errors efficiently, saving time, providing real time feedback, allowing for a detailed error explanation, and increasing confidence, which suggest a positive impact on students' writing skills. Conversely, the results highlight an overall agreement that over-reliance on these tools hinders students' critical thinking and prevents the development of editing and writing skills. Therefore, it is recommended that a these tools should be used with caution and in a balanced way; students should use them to seek progress instead of convenience, while teachers ought to guide their students for an optimal use of, and benefit from, these tools.

## List of References

- Abahussain, M. O., Shah, U., & Abdul-Rab, S. D. (2022b). Intertextual Reading: Analyzing EFL context via critical thinking. *Theory and Practice in Language Studies*, 12(5), 964–973. <https://doi.org/10.17507/tpls.1205.18>
- Adam, N. M. H. (2024b). Autonomy in acquisition: Exploring the transformative effects of self-error correction on ESL learners' proficiency and motivation. *International Journal of Science and Research Archive*, 13(2), 1043–1045. <https://doi.org/10.30574/ijrsra.2024.13.2.2140>
- Aidi Wail Abdennour, S. L. (2024). EFL Students' Attitudes Towards the Potential of AI Writing Assisting Tools in Enhancing their Academic Writing.
- Akbar, M. H. (2023). *The Use of Grammarly as a Grammar Online Checker For Students' Thesis Writing* (Doctoral dissertation, IAIN Ponorogo).
- Al Mahmud, F. (2023). Investigating EFL Students' Writing Skills Through Artificial Intelligence: Wordtune Application as a Tool. *Journal of Language Teaching & Research*, \*14\*(5).
- Al-Dulaimi, A. S. I., & Al-Nuaimi, H. S. S. (2022). Cohesion: a fundamental element in writing English texts. *JOURNAL OF LANGUAGE STUDIES*, 5(3), 277–292. <https://doi.org/10.25130/jls.5.3.16>
- Altun, M. (2023). Developing writing abilities in L2: a review. *International Journal of Social Sciences and Educational Studies*, 10(2). <https://doi.org/10.23918/ijsses.v10i2p175>
- Amina, A., & Kahina, A. (2023). *An Analysis of Students' Views about Developing Self-correction Strategies through ICTs in the Process of Writing Master's*

*Dissertation at Mouloud MAMMERI University of Tizi\_Ouzou* (Doctoral dissertation, Mouloud Mammeri University).

Anh, N. H. M., Yen, N. H., Tho, N. T. Y., & Nhut, L. M. (2022b). GRAMMATICAL ERRORS IN ACADEMIC WRITING OF ENGLISH SECOND-YEAR STUDENTS. *European Journal of English Language Teaching*, 7(6).  
<https://doi.org/10.46827/ejel.v7i6.4547>

Anikin, V., & Poyzner, B. (2024). *To the dissertation dissertation: the semantic aspect*.  
<https://doi.org/10.12737/1909143>

Anggarini, I. F., El Mahfudzah, M. F., Hidayah, S. M., Niami, Z., Faturusidah, K., & Ramadhani, R. O. (2023, July). Artificial intelligence (AI) in writing English: An EFL Madrasah researcher's perspectives. In *Conference on English Language Teaching* (pp. 1063–1073).

Anggraini, R. W. (2020b). The Discovery Learning in teaching writing skill in Junior High school. *Global Expert Jurnal Bahasa Dan Sastra*, 8(2).  
<https://doi.org/10.36982/jge.v8i2.1016>

Asaad, H. Q. M. (2024b). The role of morphological awareness in L2 postgraduates' academic writing: is vocabulary knowledge a mediating variable? *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186x.2024.2327787>

Barasa, D. (2024d). Demystifying the Discourse: Techniques to Effective Academic Writing. *Journal of Research and Academic Writing.*, 1(1), 13–21.  
<https://doi.org/10.58721/jraw.v1i1.571>

Barasa, D. (2024e). Demystifying the Discourse: Techniques to Effective Academic Writing. *Journal of Research and Academic Writing.*, 1(1), 13–21.  
<https://doi.org/10.58721/jraw.v1i1.571>

- Basiana, I. D., Dayrit, T., Estrada, S., Lugtu, J. M., Luzung, M. A., Magalona, R., ... & Ana, J. C. S. (2024). Determining The Effectiveness Of The Virtual Grammar Assistant 'Grammarly' on Improving Writing Skills. *Ignatian International Journal for Multidisciplinary Research*, \*2\*(3), 1210–1223.
- Bui, H. P. (2022). Vietnamese EFL students' use and misconceptions of cohesive devices in writing. *SAGE Open*, 12(3). <https://doi.org/10.1177/21582440221126993>
- Buulolo, G. N., Maru'ao, N., Laoli, A., & Zebua, E. P. (2024). INCREASING THE STUDENTS' ABILITY IN WRITING DESCRIPTIVE TEXT THROUGH VISUAL SPATIAL INTELLIGENCE STRATEGY AT THE TENTH GRADE OF SMK NEGERI 2 GUNUNGSITOLI IN 2023/2024. *CENDEKIA Jurnal Ilmu Pengetahuan*, 4(3), 360–370.  
<https://doi.org/10.51878/cendekia.v4i3.3285>
- Chauhan, P. (2022b). Fundamentals of Academic Writing: A Literature review. *Journal of NELTA*, 27(1–2), 161–180. <https://doi.org/10.3126/nelta.v27i1-2.53201>
- Dahal, B. K. (2023). Students' Self-Correction: A strategy for writing improvement. *Surkhet Journal*, 2(1), 41–49. <https://doi.org/10.3126/surkhetj.v2i1.58746>
- Doubtfire, J. (2020). It's Just a Draft: On the messy, the unfinished and the speculative in writing. *Journal of Writing in Creative Practice*, 13(2), 229–241.  
[https://doi.org/10.1386/jwcp\\_00006\\_1](https://doi.org/10.1386/jwcp_00006_1)
- Episiasi, E., Syaputri, W., Suramto, S., & Kasriyati, D. (2022). Lexical and grammatical cohesion in the undergraduate students' abstracts. *Linguistic English Education and Art (LEEA) Journal*, 5(2), 143–152.  
<https://doi.org/10.31539/leea.v5i2.3310>

- Gabriella, F., Asyiffa, A., & Sitorus, F. K. (2023). Analisis Pandangan Aristoteles tentang lima fungsi bahasa dalam komunikasi. *JKOMDIS Jurnal Ilmu Komunikasi Dan Media Sosial*, 3(3), 725–729. <https://doi.org/10.47233/jkomdis.v3i3.1247>
- Garduce, S. J. S., & Baluyos, E. L. (2023b). Common errors in grammar and mechanics in academic writing by senior high school students. *International Journal for Multidisciplinary Research*, 5(6).  
<https://doi.org/10.36948/ijfmr.2023.v05i06.9135>
- Gautam, P. (2019). Writing skill: An instructional overview. *Journal of NELTA Gandaki*, 2, 74–90. <https://doi.org/10.3126/jong.v2i0.26605>
- Ghanad, A. (2023c). An overview of quantitative research methods. *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS*, 06(08).  
<https://doi.org/10.47191/ijmra/v6-i8-52>
- Goldman, S. R., Carreon, A., & Smith, S. J. (2023). Aligning an editing and revising writing strategy to technology supports for students with learning disabilities. *Journal of Special Education Technology*, 39(4), 567–575.  
<https://doi.org/10.1177/01626434231211294>
- Gultom, J. (2022). Menghormati Penulis dan Mengakui Pembaca: Pendekatan Rekonsiliatif Eric J. Douglass dalam Metode Reader's Response. *Dunamis Jurnal Teologi Dan Pendidikan Kristiani*, 6(2), 809–828.  
<https://doi.org/10.30648/dun.v6i2.697>

- Gurung, R. K. (2022c). Why academic writing? *Pursuits a Journal of English Studies*, 6(1), 75–82. <https://doi.org/10.3126/pursuits.v6i1.46853>
- Gurung, R. K. (2022d). Why academic writing? *Pursuits a Journal of English Studies*, 6(1), 75–82. <https://doi.org/10.3126/pursuits.v6i1.46853>
- Sahay, N., Harsoor, S., Panditrao, M., Rao, S., Bajwa, S. S., & Tantry, T. (2022b). Dissertation writing in post graduate medical education. *Indian Journal of Anaesthesia*, 66(01), 34–65. [https://doi.org/10.4103/ija.ija\\_1106\\_21](https://doi.org/10.4103/ija.ija_1106_21)
- Hartmann, S., & Szczepaniak, R. (2023). Elements of writing systems. In *Cambridge University Press eBooks* (pp. 50–73). <https://doi.org/10.1017/9781108766463.003>
- Hartvigsen, G. (2020). Chapter 4 - Technology considerations. *Fundamentals of Telemedicine and Telehealth*, 59–90. <https://doi.org/10.1016/B978-0-12-814309-4.00004-5>
- Hiouani, A. S., & Khiari, N. E. H. (2024). The AI Degree: Exploring the Drivers of AI Tool Use in the Master’s Dissertation Writing of EFL Graduates. *Journal of Studies in Language, Culture and Society (JSLCS)*, \*7\*(2), 26–47.
- Imane, R., & Siham, H. *Investigating the Use of AI Tools to Enhance Learners’ Writing Skills in the EFL Classroom* (Doctoral dissertation, Kasdi Merbah Ouargla University).
- Iqbal, H., & Saeed, M. (2021b). Exploring the Writing Challenges Faced by M.Phil. and Ph.D. Scholars: A Case. *Global Educational Studies Review*, VI(IV), 34–41. [https://doi.org/10.31703/gesr.2021\(vi-iv\).04](https://doi.org/10.31703/gesr.2021(vi-iv).04)
- Johnson, C. D., & Smith, A. B. (2023). The Role of Research Articles in Academic Discourse. *Journal of Scholarly Communication*, \*45\*(2), 123–145.

- Kabra, U. (2023). *An Overview of ICT Technology Advancement* (pp. 1–43). [https://doi.org/10.1007/978-3-031-27765-8\\_1](https://doi.org/10.1007/978-3-031-27765-8_1)
- Kavitha, J. (2023). The impact of technology in language learning. *YMER*, \*22\*(3), 657–660. <http://ymerdigital.com>
- Khojakulova, N. (2020). Strategies how to write essays. *Bulletin of Science and Practice*, \*6\*(12), 520–528. <https://doi.org/10.33619/2414-2948/61/66>
- Kortmann, B. (2020). Linguistics: Major concepts and research traditions (pp. 1–25). J.B. Metzler, Stuttgart. [https://doi.org/10.1007/978-3-476-05678-8\\_1](https://doi.org/10.1007/978-3-476-05678-8_1)
- LaSalle, K. (2024). Writing, an Overview. Elsevier BV. <https://doi.org/10.1016/b978-0-323-95689-5.00006-7>
- Leon, L. I. (2023). Teaching academic writing as a method of improving communication skills. *Acta Marisiensis Philologia*, 5(1), 1–7. <https://doi.org/10.2478/amph-2023-0086>
- Leon, L. I. (2023b). Teaching academic writing as a method of improving communication skills. *Acta Marisiensis Philologia*, 5(1), 1–7. <https://doi.org/10.2478/amph-2023-0086>
- Lo Sardo, D. R., Gravino, P., Cuskley, C., & Loreto, V. (2023). Exploitation and exploration in text evolution: Quantifying planning and translation flows during writing. *PLoS ONE*, \*18\*(3), e0283628. <https://doi.org/10.1371/journal.pone.0283628>
- Lu, Z., Fan, M., Wang, Y., Zhao, J., Annett, M., & Wigdor, D. (2019). InkPlanner: Supporting Prewriting via Intelligent Visual Diagramming. *IEEE Transactions on*

*Visualization and Computer Graphics*, \*25\*(1), 277–287. <https://doi.org/10.1109/TVCG.2018.2864887>

Malakar, I. M. (2022). Carving the research proposal. *Journal of Population and Development*, \*3\*(1), 42–63. <https://doi.org/10.3126/jpd.v3i1.48805>

Mamba, M. A. (2024). Reading across boundaries: Cultural conflicts and remedies. *European Journal of English Language Teaching*, \*9\*(3). <https://doi.org/10.46827/ejel.v9i3.5503>

- Mazgutova, D. (2020). Changes in revision behaviours of L2 writers in an Intensive English for Academic purposes program. *International Journal of Educational Methodology*, \*6\*(4), 715–727. <https://doi.org/10.12973/ijem.6.4.715>
- Meroua, A., & Noudjoud, H. (2024). *Investigating the Usefulness of Artificial Intelligence Tools in improving Students' Academic Writing* (Doctoral dissertation, university center of abdalhafid boussouf-MILA).
- Mohammed, S., Hasan, B. A., & Ameen, S. (2023). The importance of prewriting strategies in the students' writing production. *International Journal of Humanities and Social Sciences*. <https://doi.org/10.33193/IJoHSS.54.2023.573>
- Morin, O., Kelly, P., & Winters, J. (2018). Writing, graphic codes, and asynchronous communication. *Topics in Cognitive Science*, \*12\*(2), 727–743. <https://doi.org/10.1111/tops.12386>
- Muamaroh, M., Mukti, V. C., & Haryanti, D. (2020). The Process and Problems of EFL Learners in English Writing. \*7\*(2), 405–418. <https://doi.org/10.30605/25409190.215>
- Multazam, M. N., Korompot, C. A., & Sakkir, G. (2023). Cohesion of paragraph in EFL textbook of essay writing class of Universitas Negeri Makassar. *KLASIKAL JOURNAL OF EDUCATION LANGUAGE TEACHING AND SCIENCE*, \*5\*(2), 291–300. <https://doi.org/10.52208/klasikal.v5i2.637>
- Nguyen, T. M. (2020). Integrating Information and Communication Technologies Into Second and Foreign Language Teaching: Pedagogical Benefits and Considerations. <https://doi.org/10.25073/2588-1159/VNUER.4401>

- Priyadarshi, S. (2022). Critical analysis of writing skill of english language students of bhakta kavi narsinh mehta university, junagadh, gujarat. *Towards Excellence*, 2211–2216. <https://doi.org/10.37867/te1402185>
- Raheem, B. R., & Ghafar, Z. N. (2024). Analysis of Punctuation and Spelling Errors Associated with Academic Writing among Iraqi EFL Learners. *International Journal of Second and Foreign Language Education*, \*3\*(2), 21–30. <https://doi.org/10.33422/ijjsfle.v3i2.739>
- Rama. (2022). The advantages of Implementing ICT IN Teacher Education. *International Journal of Multidisciplinary Research and Growth Evaluation*, 217–219. <https://doi.org/10.54660/anfo.2022.3.6.6>
- Reddy, N. P. A., & Reddy, N. Y. S. (2022). The impact of ICTs on teaching, learning and progressing. *International Journal of Advanced Research in Science Communication and Technology*, 144–147. <https://doi.org/10.48175/ijarsct-4986>
- Resmini, S., Bhuana, G. P., Rizkiani, S., & Maulana, A. (2024). EFL Students' Strategies in the Process of Writing. <https://doi.org/10.24256/ideas.v12i1.4729>
- Routray, S. K., & Mohanty, S. (2024). Information and communications technology for a sustainable world. *IEEE Potentials*, 2–8. <https://doi.org/10.1109/mpot.2024.3404114>
- Sa'adah, A. R. (2020). Writing skill in teaching English: An Overview. *EDUCASIA Jurnal Pendidikan Pengajaran Dan Pembelajaran*, \*5\*(1), 21–35. <https://doi.org/10.21462/educasia.v5i1.41>

- Schlosser, M. (2023). Raising university students' awareness of Automated Writing Evaluation tools in the English as a Foreign Language writing classroom to promote uptake of feedback and learner autonomy.
- Setiani, R. (2019). Students' ambiguity in writing an essay. *Edukasi Lingua Sastra*, \*17\*(1), 29–39. <https://doi.org/10.47637/elsa.v17i1.104>
- Seytnazarova, S. (2022). Teaching writing essay to intermediate level learners. *Ренессанс В Парадигме Новаций Образования И Технологий В XXI Веке*, \*1\*, 213–214. <https://doi.org/10.47689/innovations-in-edu-vol-iss1-pp213-214>
- Singh, A. D. (2023). Publishing of Research Articles with Reputed Journals: Mooring Scholarly Communication for Future Generation. *Library Progress International*, \*43\*(2), 270–277. <https://doi.org/10.48165/bpas.2023.43.2.14>
- Singh, M., & Jasuja, O. P. (2022b). Dancing pen: The ultimate test of graphically matured skilled writer. *Nowa Kodyfikacja Prawa Karnego*, \*60\*, 143–151. <https://doi.org/10.19195/2084-5065.60.9>
- Suprpto, M. A., Anditasari, A. W., Sitompul, S. K., & Setyowati, L. (2022). Undergraduate Students' Perceptions towards the Process of Writing. *Journal of English Language Teaching and Linguistics*, \*7\*(1), 185. <https://doi.org/10.21462/jeltl.v7i1.765>
- Šafranĳ, J., Bogdanović, V., & Bulatović, V. (2022). Paragraph development in scientific and technical writing. In \*Proceedings - The Eleventh International Symposium GRID 2022\* (pp. 593–598). University of Novi Sad. <https://doi.org/10.24867/grid-2022-p65>

- Swygart-Hobaugh, M. L. S. M. J., Anderson, R., George, D., & Glogowski, J. (2022). Diving Deep into Dissertations: Analyzing Graduate Students' Methodology and Data Practices to Inform Research Data Services and Subject Liaison Librarian Support. *College & Research Libraries*, \*83\*(6). <https://doi.org/10.5860/crl.83.6.887>
- Toma, F., Ardelean, A.-B., Grădinaru, C. M., Nedelea, A., & Diaconu, D. C. (2023). Effects of ICT Integration in Teaching Using Learning Activities. *Sustainability*, \*15\*(8), 6885. <https://doi.org/10.3390/su15086885>
- Triki, M. (2021). Teaching English in the Light of ICT Use in Mohamed Khider University: ICT Training Effectiveness. *مجلة العلوم الإنسانية*, \*21\*(2), 1200–1218.
- Ünlüer, Z. (2024). *Expectations, Motivations, and Satisfaction of Efl Students for Utilizing an Academic Writing Center* (Master's thesis, Middle East Technical University (Turkey)).
- Yusuf, S. (2024). Formulating a research problem statement. *Indonesian Contemporary Nursing Journal (ICON Journal)*, \*9\*(1), 1–2. <https://doi.org/10.20956/icon.v9i1.36836>
- Pandey, P., Madhusudhan, M., & Singh, B. P. (2023). Quantitative research approach and its applications in library and information science research. *Access: An International Journal of Nepal Library Association*, 2(01), 77-90.
- Vijayendra, K., Fantone, A., & Shehryar, Z. (2023). Recent Trends of Quantitative Approaches in Different Sectors: A Concise Review. *Asian Journal of Education and Social Studies*, 41(2), 22-34.

- Sharma, L. R., Jha, S., Koirala, R., Aryal, U., & Bhattarai, T. (2023). Navigating the Research Landscape: A guide to the selection of the right research design. *International Research Journal of MMC*, 4(1), 64–78. <https://doi.org/10.3126/irjmmc.v4i1.51863>
- Mahat, D., Neupane, D., & Shrestha, S. (2024). Quantitative Research Design and Sample Trends: A systematic examination of emerging paradigms and best practices. *Cognizance Journal of Multidisciplinary Studies*, 4(2), 20–27. <https://doi.org/10.47760/cognizance.2024.v04i02.002>
- Pv, I., & K, V. (2020b). Research designs-an overview. *Kerala Journal of Psychiatry*, 32(1). <https://doi.org/10.30834/kjp.32.1.2019.179>
- Peck, L. J., Rodrigues, J. N., & Wormald, J. C. R. (2023d). Research in hand surgery: types of study design. *Journal of Hand Surgery (European Volume)*, 48(9), 953–958. <https://doi.org/10.1177/17531934231186941>
- Peck, L. J., Rodrigues, J. N., & Wormald, J. C. R. (2023e). Research in hand surgery: types of study design. *Journal of Hand Surgery (European Volume)*, 48(9), 953–958. <https://doi.org/10.1177/17531934231186941>
- Raj, T. S., & Priyadharshini, V. (2024). Eyes on the barriers and challenges: Visually impaired women on activities of daily living. *Shanlax International Journal of Arts Science and Humanities*, 11(3), 1–12. <https://doi.org/10.34293/sijash.v11i3.6718>
- Mahat, D., Neupane, D., & Shrestha, S. (2024f). Quantitative Research Design and Sample Trends: A systematic examination of emerging paradigms and best practices. *Cognizance Journal of Multidisciplinary Studies*, 4(2), 20–27. <https://doi.org/10.47760/cognizance.2024.v04i02.002>
- Fudong, N. C., Wenfen, N. Y., Hongzhi, N. L., & Jun, N. T. (2024). The Motivators and Teachers Productivity in a Government Primary Education School: Basis for a Human Resource Policy Proposal. *Journal of World Englishes and Educational Practices*, 6(1), 167–193. <https://doi.org/10.32996/jweep.2024.6.1.7>
- Manning, S. (2020). A discussion of social science research as systematic inquiry. *International Journal on Studies in English Language and Literature*, 8(8). <https://doi.org/10.20431/2347-3134.0808002>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

- Malik, Y. R., Sheikh, M. S., & Yousaf, S. (2022c). Probability and sampling in dentistry. In *Dentistry*. <https://doi.org/10.5772/intechopen.97705>
- Suriani, N., Risnita, N., & Jailani, M. S. (2023c). Konsep Populasi dan Sampling Serta Pemilihan Partisipan Ditinjau Dari Penelitian Ilmiah Pendidikan. *Jurnal IHSAN Jurnal Pendidikan Islam*, 1(2), 24–36. <https://doi.org/10.61104/ihsan.v1i2.55>
- Malik, Y. R., Sheikh, M. S., & Yousaf, S. (2022d). Probability and sampling in dentistry. In *Dentistry*. <https://doi.org/10.5772/intechopen.97705>
- Hossan, D., Mansor, Z. D., & Jaharuddin, N. S. (2023). Research population and sampling in quantitative study. *International Journal of Business and Technopreneurship (IJBT)*, 13(3), 209–222. <https://doi.org/10.58915/ijbt.v13i3.263>
- G, A. (2024c). Sample size determination and sampling technique. *International Journal of Science and Research (IJSR)*, 13(9), 1432–1440. <https://doi.org/10.21275/es24924103353>
- Wahab, N. A. (2021). Sampling dalam Penelitian Kesehatan. *Jurnal Pendidikan Dan Teknologi Kesehatan*, 4(1), 38–45. <https://doi.org/10.56467/jptk.v4i1.23>
- Hossan, D., Mansor, Z. D., & Jaharuddin, N. S. (2023b). Research population and sampling in quantitative study. *International Journal of Business and Technopreneurship (IJBT)*, 13(3), 209–222. <https://doi.org/10.58915/ijbt.v13i3.263>
- Mazhar, S. A. (2021). Methods of data collection: a fundamental tool of research. *JOURNAL OF INTEGRATED COMMUNITY HEALTH*, 10(01), 6–10. <https://doi.org/10.24321/2319.9113.202101>
- Chadli, F. E., Gretete, D., & Moumen, A. (2021). Data Analysis within a Scientific Research Methodology. *Data Analysis Within a Scientific Research Methodology*, 148–153. <https://doi.org/10.5220/0010730000003101>
- Barella, Y., Fergina, A., Mustami, M. K., Rahman, U., & Alajaili, H. M. A. (2024). Quantitative methods in scientific research. *Jurnal Pendidikan Sosiologi Dan Humaniora*, 15(1), 281. <https://doi.org/10.26418/j-psh.v15i1.71528>
- Li, N. (2020). Descriptive analysis of American culture, values, and beliefs. *Deleted Journal*, 10(7). <https://doi.org/10.30845/ijhss.v10n7p4>
- Abulela, M. a. A., & Harwell, M. (2020). Data analysis: Strengthening inferences in quantitative education studies conducted by novice researchers. *Educational Sciences Theory & Practice*, 20(1), 59–78. <https://doi.org/10.12738/jestp.2020.1.005>

# Appendix 1: Students' Questionnaire

## Consent information

**Department of English Language, BBA University**

**Research team:** Hassani Salah Addine & Gasmi Issam

**Supervisor:** Dr. Mohamed Laoubi

We invite you to share your input in a survey concerning “**Analyzing the use of grammar checking tools by EFL learners in writing their dissertation**”. Participation in this survey is voluntary. All responses are strictly confidential. The data gathered is solely for the research purposes. All personal information will remain confidential and anonymous. The survey will take approximately 10–15 minutes to complete. Your participation will contribute to a better understanding of how grammar-checking tools can support students in academic writing. This research may help improve educational tools and resources for future students. There are no risks associated with participating in this survey.

You can contact us in this email if you have any further information

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**AI grammar checker tools:** A computer programs that use artificial intelligence to find and fix grammar, spelling, punctuation, and style errors in writing. They help improve the clarity and correctness of text automatically. For an example: Grammarly, Chatbots, ProWritingAid, Quillbot ... etc.

## Section one: Student's background

1. Do you have any prior experience with grammar-checking tools before starting your dissertation?

Yes

No

2. How would you rate your proficiency in academic writing?

Beginner

Intermediate

Advanced

Expert

3. Which AI grammar checker tools are you familiar with?

Grammarly

Quillbot

ProWritingAid

Microsoft Editor

Scribbr

Other

## Section two:

1. How often do you use grammar-checking tools when writing your dissertation?

Never

Rarely

Sometimes

Often

Always

2. How likely are you to use grammar-checking tools for your dissertation ?

Very unlikely

Unlikely

Neutral

Likely

Very likely

3. What is your primary reason for using grammar-checking tools?

To improve grammar accuracy

To save time

To meet academic standards

To enhance readability

Other

4. How likely are you to recommend grammar-checking tools to other students?

Very unlikely  Unlikely  Neutral

Likely  Very likely

5. Do you believe grammar-checking tools are essential for writing a dissertation?

Strongly disagree  Disagree  Neutral

Agree  Strongly agree

### Section three:

1. Which of the following AI grammar-checking tool features do you use most frequently?

(Choose one or more options)

Grammar correction  Spelling correction  Punctuation correction

Style and tone suggestions  Plagiarism Detection

In the table below, classify the following AI grammar-checking tools according to your use.

Features	Always	Usually	Sometimes	Rarely	Never
<b>Grammar Correction</b>					
<b>Spelling Correction</b>					
<b>Punctuation Correction</b>					
<b>Style And Tone Suggestions</b>					
<b>Plagiarism Detection</b>					

2. How useful do you find the grammar correction feature?

Not useful at all  Slightly useful  Moderately useful

Useful  very useful

3. Which feature do you consider the most important in a grammar-checking tool? (Choose only one option)

Real-time feedback

Detailed error explanations

Multilingual support

Integration with word processors

Other? specify

4. How often do you use the plagiarism detection feature in grammar-checking tools?

Never

Rarely

Sometimes

Often

Always

5. Do you find the style and tone suggestions provided by grammar-checking tools helpful?

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

#### **Section four:**

1. Which of the following errors do you make most frequently in your writing?

Subject-verb agreement

Tense inconsistency

Punctuation errors

Spelling mistakes

Others? Specify.

2. How often do you make grammar errors in your dissertation?

Never

Rarely

Sometimes

Often

Always

3. Which type of error do you find most challenging to correct? (Choose one or more options)

Grammar errors

Spelling errors

Punctuation errors

Style and tone issues

Other

4. How often do you rely on grammar-checking tools to identify errors in your writing?

Never  Rarely  Sometimes

Often  Always

5. Do you think grammar-checking tools effectively identify your most common errors?

Strongly disagree  Disagree  Neutral

Agree  Strongly agree

### **Section five:**

1. To what extent do ethical concerns (e.g. plagiarism, overreliance ...) discourage you from using these tools in your writing?

Not at all  Slightly  Moderately

Very much  Extremely

2. To what extent do you agree or disagree with banning the use of AI writing tools (e.g., ChatGPT) for graded assignments in universities?

Strongly disagree  Disagree  Neutral

Agree  Strongly agree

3. To what extent do you agree with the following statements?

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AI writing tools help me improve my grammar more effectively than manual proofreading.					
Using AI tools has helped me identify recurring mistakes in my writing.					
I feel more confident in my writing skills after using AI assistance.					
AI tools have expanded my vocabulary and improved my sentence structure.					

4. What motivates you to use grammar-checking tools for your dissertation? (Choose one or more options)

Improved grades

Time efficiency

Peer or supervisor recommendations

Lack of confidence in writing

Other

5. How important is classmate feedback in your decision to use grammar-checking tools?

Not important at all  Slightly important  Moderately important

Important  Very important

6. Which of the following factors discourages you from using grammar-checking tools?  
(Choose one or more options)

Lack of accuracy

High cost

Complexity of use

Limited features

Other

**7.** How much does the availability of free grammar-checking tools influence your decision to use them?

Not at all  Slightly  Moderately

Very much  Extremely

**8.** Do you believe using grammar-checking tools improves the quality of your dissertation?

Strongly disagree  Disagree  Neutral

Agree  Strongly agree

## Appendix 2: Teachers' Questionnaire

### Consent information

**Department of English Language, BBA University**

**Research team:** Hassani Salah Addine & Gasmi Issam

**Supervisor:** Dr. Mohamed Laoubi

### Dear Teachers

We kindly invite you to participate in our research study titled “**Analyzing the Use of Grammar Checking Tools by EFL Learners in Dissertation Writing**”. The purpose of **this** study is to examine **teachers' perceptions** of how these tools affect students' writing skills, particularly in **grammar proficiency and critical thinking**. **Your participation in this research will help us collect important data as well as achieve the objective of the survey, and we will be grateful for your contribution**. The survey will take approximately 10–15 minutes to complete. All responses are strictly confidential. The data gathered is solely for the research purposes. All personal information will remain confidential and anonymous. There are no risks associated with participating in this survey. Thank you for taking the time to complete this survey.

You can contact us in this email if you have any further information

**Email:** [salahaddine.hassani@univ-bba.dz](mailto:salahaddine.hassani@univ-bba.dz)

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### Demographic and Contextual Questions

1. How often do you incorporate technology into your teaching?

Always  Usually  Sometimes

Rarely  Never

2. As a teacher, do you support using grammar checker tools while writing dissertation?

Yes  No  Maybe

3. Which AI grammar checker tools are you or your students familiar with?

Grammarly  Quillbot  ProWritingAid

Microsoft Editor  Scribbr  Other

### Section 2: Grammar Proficiency

1. To what extent do you agree with the following statements?

The statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Grammar checking tools help students identify and correct grammatical errors effectively.					
Over time, students who use grammar-checking tools show improvement in their grammar skills.					

2. Do you think students become overly reliant on grammar-checking tools and fail to learn grammar rules independently?

Yes  No  Maybe

### Section 3: Critical Thinking

1. How strongly do you agree or disagree with the following statements?

<b>The statements</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Grammar-checking tools encourage students to think critically about their writing.					
Students evaluate and question the suggestions provided by grammar-checking tools					
Grammar-checking tools limit students' ability to think critically about their writing.					

### Section 4: Skill Development

1. How much do you agree or disagree with the following statement?

<b>The statements</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Students use grammar-checking tools as a substitute for developing their own editing skills.					
Overall, grammar-checking tools have a positive impact on students' writing skills.					

## **Section 5: Benefits and Challenges of Grammar-Checking Tools in EFL Classrooms**

### **1. What do you see as the main benefits of using grammar-checking tools in the classroom?**

- Helps students identify and correct errors more efficiently
- Improves students' grammar skills over time
- Encourages students to think critically about their writing
- Saves time for teachers in providing feedback
- Builds students' confidence in writing
- Other (please specify) :

### **2. What challenges or drawbacks have you observed when students use grammar-checking tools?**

- Students become overly reliant on the tools
- Students do not learn grammar rules independently
- Tools may provide incorrect or misleading suggestions
- Limits students' critical thinking about their writing
- Reduces students' motivation to develop editing skills
- Other (please specify) :

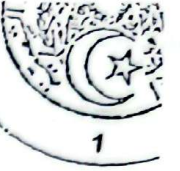
## ملخص

تبحث هذه الدراسة في مدى تأثير تكرار الاستخدام والميزات المفضلة وأنواع الأخطاء التي تم تصحيحها والعوامل المحفزة وتصورات المعلمين على تبني الطلاب لأدوات التدقيق النحوي وفعاليتها في كتابة الأطروحات. تم اعتماد نهج كمي وتحليل إحصائي وصفي. تم استخدام استبيان استطلاعي كأداة لجمع البيانات من كلا الجانبين، الطلاب والمعلمين. كانت العينة المستهدفة 100 من أصل 135 طالبًا في الماجستير 2، و15 معلمًا للغة الإنجليزية من قسم اللغة الإنجليزية في جامعة البشير إبراهيمي BBA خلال العام 2024-2025. تم اختيار الطلاب بناءً على عينة عشوائية بسيطة، بينما تم استخدام عينة ملائمة للمعلمين. تم تحليل البيانات المجمعة إحصائيًا باستخدام البرامج الإحصائية "Microsoft Excel" و "SPSS Software". كشفت النتائج أن الطلاب يستخدمون أدوات التدقيق النحوي بالذكاء الاصطناعي في معظم الأحيان لتصحيح الأخطاء النحوية في كتاباتهم. كان الدافع وراء استخدام الطلاب لهذه الأدوات هو التغذية الراجعة الفورية، والشرح التفصيلي للأخطاء، وكفاءة الذكاء الاصطناعي من حيث الوقت، والثقة في كتاباتهم. كانت Grammarly و quillbot الأكثر شيوعًا واستخدامًا من قبل الطلاب والمعلمين. علاوة على ذلك، تنعكس هذه الأدوات بشكل إيجابي على كتابة الطلاب، ولكن معظم المعلمين اتفقوا على أن الطلاب أصبحوا يعتمدون بشكل مفرط على أدوات التدقيق النحوي بالذكاء الاصطناعي في كتاباتهم بما في ذلك (الأطروحات). يمكن أن يؤدي هذا الاعتماد المفرط إلى تراجع في قدرات التفكير النقدي لدى الطلاب ومهاراتهم في تحرير كتاباتهم. يقترح اتباع نهج متوازن، حيث يمكن أن يؤدي استخدام هذه الأدوات دون الاعتماد عليها بشكل مفرط إلى تحسن ملحوظ في مهارات الكتابة لدى الطلاب.

## Résumé

Cette étude examine dans quelle mesure la fréquence d'utilisation, les fonctionnalités préférées, les types d'erreurs corrigées, les facteurs de motivation et les perceptions des enseignants permettent de prédire l'adoption et l'efficacité des outils de vérification grammaticale dans la rédaction de thèses. Une approche quantitative et une analyse statistique descriptive ont été adoptées. Un questionnaire a été utilisé comme instrument pour collecter les données auprès des étudiants et des enseignants. L'échantillon cible était composé de 100 étudiants sur 135 étudiants en master 2 et de 15 professeurs d'anglais du département d'anglais de l'université el Bachir Ibrahim BBA pendant l'année 2024-2025. La sélection des étudiants s'est faite par échantillonnage aléatoire simple, tandis que l'échantillonnage de commodité a été utilisé pour les enseignants. Les données collectées ont été analysées statistiquement à l'aide des logiciels statistiques « Microsoft Excel » et « SPSS Software ». Les résultats ont révélé que les étudiants utilisent la plupart du temps des outils de vérification grammaticale basés sur l'IA pour corriger les erreurs grammaticales dans leurs écrits. Les étudiants étaient motivés par le retour immédiat, l'explication détaillée des erreurs, le gain de temps apporté par l'IA et la confiance dans leurs écrits. Grammarly et Quilbot étaient les outils les plus connus et les plus utilisés par les étudiants et les enseignants. De plus, ces outils ont un impact positif sur l'écriture des étudiants, mais la plupart des enseignants s'accordent à dire que les étudiants deviennent trop dépendants de ces outils de vérification grammaticale basés sur l'IA dans leurs écrits, y compris leurs mémoires. Cette dépendance excessive peut entraîner un faible progrès des capacités de réflexion critique des étudiants et de leurs compétences en matière de révision de leurs écrits. Une approche équilibrée est suggérée : l'utilisation de ces outils sans en dépendre peut conduire à une amélioration notable des compétences rédactionnelles des étudiants.

\* ملحق بالقرار رقم 10824... المؤرخ في .....  
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها



الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:

نموذج التصريح الشرقي  
الخاص بالالتزام بقواعد النزاهة العلمية لإنجاز بحث

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المسجل(ة) بكلية / معهد اللغويات الأجنبية قسم اللغة الإنجليزية  
والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماستر، مذكرة ماجستير، أطروحة دكتوراه).  
عنوانها: Analyzing the use of Grammar-Checking Tools in dissertation  
writing: the case of Master 2 Students at BSA University  
أصريح بشرفي أنني ألتزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية  
المدونة في إنجاز البحث المذكور أعلاه .

التاريخ: 02/07/2025...

توقيع المعني (ة)



توقيع  
بورفان الشريف العيسد

27 جعد 2020

\* الملحق بالقرار رقم 10826... المؤرخ في .....  
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها

الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:


نموذج التصريح الشرقي  
الخاص بالالتزام بقواعد النزاهة العلمية لإجازة بحث

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المسجل(ة) بكلية / معهد اللغة الأجنبية قسم اللغة الإنجليزية .....  
والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماستر، مذكرة ماجستير، أطروحة دكتوراه)،  
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المذكورة في إنجاز البحث المذكور أعلاه .

التاريخ: 07/07/2025

توقيع المعني (ة)



توقيع السيد:  
بطاقة التعريف رقم:  
بتاريخ:  
مصادق عليه:  
07 2025  
رئيس المجلس الشعبي البلدي  
والمكلف(ة) بالإدارة الإقليمية  
هداحي عبد الكريم

