



The Effect of Meta Discourse Markers Instruction on Improving ESP Learners' Business Letter Writing Skills

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Abstract

This study explored the effects of explicit instruction in metadiscourse markers on the business letter-writing proficiency of ESP students majoring in Business Administration at Payame Noor University-Rey Branch. Given the crucial role of metadiscourse markers in fostering coherence and engaging readers, the research sought to evaluate whether focused instruction could improve learners' writing performance. A total of 60 ESP students were homogenized and randomly assigned to an experimental group ($n = 30$) and a control group ($n = 30$). The experimental group underwent explicit task-based instruction emphasizing the use of metadiscourse markers in business letter-writing tasks, while the control group followed a conventional instructional approach without such emphasis. Both groups participated in pre-test and post-test evaluations to measure changes in writing quality. An ANCOVA analysis revealed a significant improvement in the writing performance of the experimental group compared to the control group, $F(1, 57) = 14.86$, $p = 0.001$, $p < 0.01$. The findings underscore the pedagogical value of integrating metadiscourse marker instruction into ESP writing courses, highlighting its potential to enhance clarity, persuasiveness, and overall quality in students' business letters. These results offer actionable insights for language educators and curriculum developers seeking to improve writing instruction in ESP contexts.

Keywords: business letter writing, ESP learners, language teaching, metadiscourse markers, writing

1. Introduction

In recent years, the focus on writing instruction within ESP contexts has grown due to its pivotal role in developing both linguistic proficiency and critical thinking skills (Wongsa et al., 2024). Writing is widely regarded as one of the most demanding productive skills, as it necessitates not only lexical and grammatical competence but also the ability to organize and articulate ideas effectively. Business letter writing, as a formal and highly structured genre, presents particular challenges for ESP learners. These challenges are further compounded by the requirement for precision, formality, and adherence to



linguistic conventions (Parsaiyan et al., 2023). Despite the importance of these skills, writing instruction for business correspondence often remains underemphasized in language curricula, leaving a significant gap in learners' communicative abilities.

In today's globalized world, the ability to write effective business letters is essential in both academic and professional settings (Kolin, 2013). Although digital platforms such as email and instant messaging dominate modern communication, formal letters continue to be indispensable for purposes like university applications, job inquiries, and official correspondence (Wariunsora et al., 2024). This underscores the necessity of equipping ESP learners with strategies to excel in this genre. One effective approach involves the explicit instruction of metadiscourse markers, which are linguistic tools that structure the text, engage the reader, and convey the writer's perspective (Wongsa et al., 2024).

Metadiscourse markers play a vital role in organizing content and facilitating reader comprehension by providing both interactive elements (e.g., transitions, frame markers) and interactional elements (e.g., hedges, boosters, self-mentions) (Hyland, 2005). Research has established that the use of these markers enhances the clarity, coherence, and persuasiveness of written texts (Izzatullakhon, 2024). Studies such as those by Wongsa et al. (2024) and Esfandiari and Allaf-Akbary (2024) have shown the benefits of metadiscourse instruction in improving the cohesion and engagement of various types of writing, including academic and argumentative texts. However, there remains a paucity of research examining the impact of metadiscourse markers specifically in the domain of business letter writing for ESP learners, highlighting the need for further investigation.

This study addresses the lack of effective instructional strategies for improving ESP learners' business letter-writing proficiency, a skill critical for their academic and professional success. While the pedagogical value of metadiscourse markers in producing coherent and reader-friendly texts has been recognized, explicit instruction in their use remains underexplored in this specific context. By examining the effect of metadiscourse marker instruction on the quality of business letters, this research seeks to bridge this gap and provide empirical evidence to inform best practices in ESP writing pedagogy.

The study's contributions are twofold. First, it offers insights into how integrating metadiscourse instruction into ESP curricula can enhance learners' understanding of text structure, authorial stance, and reader engagement, thereby improving their writing performance. Second, it aligns with emerging trends in AI-driven language education, where automated writing tools are increasingly utilized to provide feedback on metadiscourse usage (Wen et al., 2024). By investigating the efficacy of explicit instruction, the study also informs the development of AI-based writing aids, ensuring their pedagogical relevance and utility.

For language educators, this research emphasizes the need to train teachers in recognizing and teaching metadiscourse markers as part of a comprehensive writing program. Such training equips educators to better address the challenges faced by ESP learners in mastering formal writing tasks. Additionally, integrating AI tools that focus on metadiscourse offers learners personalized feedback, enabling targeted practice and iterative improvement (Wariunsora et al., 2024).

In conclusion, this study aims to address a critical gap in the literature by investigating the impact of explicit metadiscourse marker instruction on the business letter-writing skills of ESP learners. Through empirical analysis, the findings provide actionable recommendations for enhancing writing instruction and contribute to the growing body of knowledge in ESP pedagogy. The study's implications

extend to curriculum development, teacher training, and the integration of innovative, AI-supported instructional tools in language education.

2. Literature Review

2.1. Theoretical Framework

2.1.1. Introduction to Metadiscourse Markers

Metadiscourse markers have emerged as a critical focus in discourse analysis and language education, particularly for their ability to enhance textual cohesion, guide readers, and reflect the writer's perspective. This study draws on Hyland's (2005) comprehensive model of metadiscourse, which categorizes these markers as essential tools for engaging readers and structuring discourse effectively. Hyland's model differentiates metadiscourse markers into two primary categories: interactive resources, which organize discourse, and interactional resources, which involve the writer's engagement with the audience.

Building on prior models by Crismore (1985) and Jiang and Akbaş (2024), Hyland's framework expands the understanding of metadiscourse as non-propositional linguistic elements that address rhetorical strategies rather than the content itself. The model aligns with Halliday's (1994) triadic metafunctions of language—ideational, textual, and interpersonal—with a particular emphasis on the interpersonal function. This emphasis underscores how writers utilize metadiscourse markers to manage reader expectations and present arguments persuasively, thereby fostering an interactive relationship with their audience.

2.2. Hyland's Model of Metadiscourse

The integration of Big Culture in EFL textbooks is crucial for enhancing cultural awareness and understanding among learners. Big Culture encompasses large-scale cultural constructs like national identity, historical events, and global issues, providing students with a broader perspective of the world. By integrating themes like democracy, human rights, and environmental sustainability, EFL textbooks equip students with the knowledge to engage in global conversations and cultivate a sense of belonging within a larger community. This exposure encourages critical thinking regarding cultural identities and promotes appreciation for diverse perspectives.

Teaching about small culture can help students navigate real-life interactions more effectively, as they are better equipped to understand the subtleties of everyday communication in various contexts. Emphasizing small culture is key to fostering meaningful language acquisition and effective communication within educational frameworks.

Derakhshan (2024) examined the cultural representation in EFL textbooks from the perspectives of Iranian EFL students, teachers, and teachers' educators. The study revealed three themes: co-instantiation of image and text was indexical (relating to or denoting a word or expression whose meaning is dependent on the context in which it is used), cultural awareness and connotations were almost untouched, textual and visual components driving intercultural meaning were not in accordance with tasks, and some alternatives and more culturally engaging images were provided by the interviewees.

Brody (2003) divided culture into two concepts: "Big C" culture, which shows the formal culture (a set of facts and statistics relating to arts, history, geography, business, education, festivals, and customs), and "little C" culture, which refers to the routine aspects of life and encompasses everything as a total way of life. Integrating Big "C" culture into English as a Foreign Language (EFL) textbooks is crucial for providing students with a comprehensive understanding of the linguistic and cultural contexts in which the language operates.

Teaching about small culture helps students navigate real-life interactions more effectively, as they are better equipped to understand the subtleties of everyday communication in various contexts. Teachers' attitudes towards the inclusion of Big "C" culture can significantly influence curriculum design and classroom practices, highlighting the necessity for teachers to recognize the importance of cultural components in language education. EFL (English as a Foreign Language) textbooks often reflect a dichotomy between Big "C" culture, which encompasses arts, history, and literature, and Small "c" culture, which pertains to everyday customs and societal behaviors. This imbalance affects the representation of diverse cultural dimensions and shapes teachers' attitudes towards the material, potentially favoring an elitist perspective on culture that neglects the nuances of local traditions and values. This can lead to a disconnection between learners and the profound complexities of cultural identity in language learning environments.

Incorporating small "c" culture into EFL materials fosters a more engaging and contextually relevant learning experience, allowing students to grasp not just language forms but also the intricate social cues and practices that underlie effective communication. This enables learners to navigate real-life interactions more successfully, bridging the gap between theoretical knowledge and practical language use. EFL textbooks that emphasize small "c" culture can better equip students for authentic communication, underscoring the importance of cultural fluency as an integral aspect of language competence. Language learning materials often reflect the everyday practices and social norms of the cultures they represent, serving as a nexus between linguistic competence and cultural awareness. Common themes and scenarios present in EFL textbooks often embed cultural narratives that reinforce or challenge existing social norms. The selection and framing of these everyday practices can either perpetuate stereotypes or foster a more nuanced understanding of cultural diversity. Therefore, it is imperative for educators and curriculum developers to critically evaluate the cultural representations within language materials to ensure they promote inclusivity and reflect a comprehensive view of the target culture. (Peterson et al., 2003).

Chen (2010) and Yuen (2011) conducted semiotic analyses (Semiology is the study of signs. This type of analysis investigates how a text produces meaning through signs and how this meaning connects with other "broader systems of meaning". It is argued that these signs often uphold ideological codes within our society) of images in English as a Setyono and Widodo's (2019) analysis of Indonesian EFL textbooks emphasized the importance of multicultural values and representation of diverse cultures. Furthermore, Tajeddin and Teimournezhad (2014) found that the sociological sense of culture was the most common, followed by the aesthetic sense. Also, Jennifer Matic (2015) investigated the cultural content of EFL materials used with second-year students majoring in English at the university level in Belgrade. Statistical analysis revealed that small "c" cultural themes were more common than large "C" themes, with literature, education, and institutions being the most common specific topics related to culture with a capital "C". The most common topics related to cultures with a small "c" include values, beliefs, attitudes, everyday life, and interpersonal relationships.

Additionally, Sadeghi et al. (2018) and Ashrafi et al. (2018) conducted studies on the cultural content of EFL textbooks. Sadeghi's study found that small "C" cultural topics, such as daily life, food, customs/norms, and geography, were the most common, while values and beliefs were the most common minor "C" cultural themes in *Summit* and *Passages*. The study also explored the relationship between EFL teachers' and learners' cultural preferences and the correspondence between their preferences and the cultural content of the book.

Besides, Ashrafi's (2018) study examined the Iran Language Institute's Advanced Series to identify differences in big and small "C" cultural aspects, distribution of references to different cultural categories, and the most prevalent themes. The analysis revealed that source culture received the least attention, making target culture the dominant cultural category. There was a significant disparity between two advanced textbooks, with themes from the "little C" cultural dimension appearing slightly more frequently than those from the "large C" dimension.

Also, the recurrence of themes throughout all textbooks was inconsistent, with common little "C" themes like "living condition," "social convention," and "body language" being the key lacking topics. This may hinder Iranian learners' intercultural communication competency (ICC) development due to the absence of source knowledge and uneven portrayal of cultural topics, making it challenging for them to develop intercultural communication skills.

Labtic et al. (2019) also examined the cultural content in English textbooks, focusing on Thai English textbooks. They used Lee's (2009) work and the Common European Approach to Reference for Languages (2001) to examine the cultural content in these textbooks. The results showed that Big "C" Culture was slightly more prevalent than Small "C" Culture, and both were more frequently present in receptive skills like reading and listening than in productive abilities like speaking and writing. This study aims to help students learn about culture as a component of intercultural communicative competency and better prepare EFL students for international communication contexts.

In addition, Espinar et al. (2019) investigated the development of culture in English foreign language textbooks using English File. They analyzed the contents of two editions of the same book using a unique list of cultural factors to determine changes in the types of cultural content or subject categories covered. Mesekher (2014) also explored cultural representation in Algerian English textbooks, where teachers rely heavily on textbooks as a source of both language and culture in education.

Derakhshan's (2024) study on the representation of culture in language textbooks revealed a significant gap in the adoption of a semiotic approach, despite its potential for effectively conveying and constructing cultural meanings. The researcher used a qualitative analysis grounded in Peircean semiotic theory to address these shortcomings. The study focused on the Iranian national EFL textbook titled *Vision 1*, analyzing the perspectives of Iranian EFL students, teachers, and teacher educators.

The analysis revealed that the co-instantiation of images and texts was predominantly indexical, but cultural awareness and associated connotations were largely overlooked. The findings also highlighted a misalignment between textual and visual components, suggesting that tasks designed to facilitate understanding did not effectively correspond with the presented content.

Several interviewees proposed alternative images that were more culturally engaging, indicating a desire for more relevant and relatable representations in educational materials. These suggestions

suggest a need for textbooks that not only incorporate cultural aspects but also resonate with students' lived experiences. This study reveals that the discourse within an Iranian localized EFL textbook offers limited opportunities for enhancing cultural awareness among its users. The study proposes a dynamic model to evaluate cultural representations in language textbooks, aiming to illustrate how EFL textbooks can be designed, implemented, and received more effectively for teaching and learning in diverse instructional settings. The approach seeks to enrich the educational experience by fostering a deeper understanding of cultural contexts through language learning.

In 2010, Juan conducted a comprehensive analysis of the cultural content present in EFL textbooks. These resources significantly enhance students' understanding of different cultural practices, beliefs, and values, which are essential for developing intercultural communication skills in today's interconnected world. The present article aims to conduct a detailed content analysis of the College English (New) textbook, CE (New), to reveal the extent to which the textbook fosters a deeper appreciation for cultural diversity and prepares students for effective communication across cultural boundaries. The study emphasizes the importance of cultural content in language education and its role in equipping students with the necessary skills to navigate an increasingly globalized society.

The article analyzes the cultural content in the College English (New) textbook, focusing on its ability to foster appreciation for cultural diversity and prepare students for effective communication across cultural boundaries. The study highlights the importance of cultural content in language education and its role in equipping students with the necessary skills to navigate an increasingly globalized society. In 2011, Yuen conducted a case study on English language textbooks in Hong Kong, revealing a preference for cultural representations from English-speaking countries, while cultures from Africa were absent. Yuen's study categorized cultural references into four areas: products, practices, perspectives, and persons, emphasizing the need for a balanced and fair representation of various cultures in language education materials.

Setyono and Widodo's (2019) analysis on EFL textbooks in Indonesia also highlighted the need to incorporate multicultural values and diverse cultural representations in educational resources. They argue that as English becomes a global lingua franca, it becomes crucial to integrate both significant cultural elements (big "C") and everyday cultural aspects (small "c") in language education. By including a rich variety of cultural elements, students can improve their language skills and gain valuable insights into different ways of life, fostering a greater appreciation for diversity in our interconnected world.

Moreover, Tajeddin and Teimournezhad's (2014) study on the cultural content in EFL textbooks in Iran revealed that the sociological interpretation of culture was the predominant component, primarily addressing social structures, relationships, and community dynamics. The aesthetic sense of culture was the second most represented category, but the researchers noted a lack of detailed exploration regarding the specific elements that constitute the aesthetic sense within the textbooks.

A similar study by Jelena Matic (2015) investigated the representation of both Big "C" and small "c" culture in EFL materials for university students in Belgrade. The analysis revealed that small "c" cultural themes, which encompass values, beliefs, and everyday social practices, were more common than the Big "C" culture, which included literature, educational systems, and major cultural institutions. On the other hand, the themes associated with small "c" culture primarily encompassed values, beliefs, and attitudes, illustrating the everyday aspects of life. This distinction between the two types of cultural

representation underscores the importance of both sociological and aesthetic dimensions in the context of EFL education.

Sadeghi et al. (2018) and Labtic et al. (2019) conducted studies on the representation of cultural information in ELT textbooks. Sadeghi et al.'s (2018) study analyzed three EFL textbooks and focused on major and minor "C" cultural themes, categorizing them into history, traditions, and everyday practices and beliefs. Labtic et al.'s (2019) study focused on the representation of cultural information in Thai English textbooks, specifically examining how different types of culture are exhibited across the four essential language learning skills: reading, writing, listening, and speaking.

The study used foundational principles established by Lee (2009) and guidelines set forth by the Common European Framework of Reference for Languages (2001). The cultural content was categorized into Big "C" Culture and Small "C" Culture, with Big "C" Culture encompassing formal aspects of culture like art, literature, and historical events, and Small "C" Culture referring to everyday practices and social norms. The findings revealed that Big "C" Culture was slightly more prevalent than Small "C" Culture in the textbooks examined, and both types of cultural content were more commonly found in receptive language skills (reading and listening) rather than productive language skills (speaking and writing).

The study by Spinar et al. (2019) explores the evolution of cultural representation in EFL textbooks, focusing on the English File series. The research provides an overview of the trends in how culture is integrated into English teaching, particularly in foreign language education. The authors explore various methodologies for conducting cultural analysis of textbooks, providing insights into how these materials reflect and transmit cultural knowledge. The study then examines the cultural content found within two distinct editions of the same Intermediate (B1) English as a Foreign Language textbook in the English File series. The researchers use a specific and carefully curated list of cultural factors to facilitate this comparison. The study aims to uncover any notable shifts or transformations in the types of cultural representations and subject categories presented within the textbooks. This comparative analysis is vital for understanding the evolution of cultural teaching strategies in language education and provides valuable insights into how educational materials adapt to reflect broader societal changes and current trends in cultural awareness. The findings can contribute significantly to the ongoing dialogue on the role of culture in language teaching and the effectiveness of instructional materials in fostering cultural understanding among learners.

Baleghizadeh et al. (2020) investigated the cultural representations of three ESL grammar textbooks. Contrary to expectations, practical aspects of culture, including social behavioral patterns and important customs, were found in most of the textbooks analyzed. The range of foreign cultures revealed in these textbooks lacked balance, possibly because English-speaking culture occupies a larger space in textbooks than international culture. By using English as an international language, learners are encouraged to develop cross-cultural skills and facilitate effective communication with people from different backgrounds. Their findings reveal an unexpected outcome concerning the anticipated cultural neutrality typically associated with grammar textbooks. Instead of presenting a purely objective approach to language, these textbooks incorporate practical aspects of culture that reflect specific social behavior patterns. This includes notable insights into daily life and significant customs that are prevalent in the societies from which the language originates. Upon analyzing the content of these textbooks, it became evident that the portrayal of foreign cultures is not only present but also unevenly represented.

English-speaking cultures tend to dominate the narratives within these educational resources, overshadowing the diverse international cultures that are essential for a well-rounded understanding of the language.

Consequently, learners encounter a limited exposure to the rich variety of global cultures, which could hinder their ability to engage effectively with people from different backgrounds. By adopting English as an international language, learners stand to gain valuable support in developing cross-cultural skills that enhance communication and understanding across cultural divides. However, this potential can only be realized if textbook authors prioritize and incorporate a broader representation of international cultures in their materials, thus fostering a more inclusive and comprehensive language learning environment.

Extensive research conducted in the field of education has highlighted the significant emphasis placed on cultural aspects within various types of textbooks. A number of studies, both by Iranian scholars and researchers from other countries, have specifically examined the presence of cultural elements within these educational resources. These investigations have sought to quantify and analyze the extent of cultural representation found in textbooks. Additionally, some researchers have endeavored to create a systematic framework aimed at evaluating the cultural content present in these educational materials. As it is showed in the previous research all confirmed the importance of the cultural code in EFL textbooks and EFL class.

Zhang and Liu's (2021) study found that small "c" culture is often represented through dialogues and everyday scenarios in EFL textbooks, while big "c" culture is primarily represented through literature and historical texts. They emphasized the need for a balanced approach to ensure learners gain a holistic understanding of culture. Alptekin's research showed that integrating small "c" culture in textbooks can enhance communicative competence, making learners more adept at real-life interactions in English-speaking contexts.

Banaruee et al. (2023) assessed whether the textbooks meet standardized principles regarding Communication and Culture and examined the implementation of cultural knowledge and technology in the Vision Series. The evaluation revealed that Vision 3 was more preferable than Vision 1 and 2, but all Vision textbooks had low standards for enhancing language learners' cultural competence. This research emphasizes the importance of cultural awareness in English language learning within the expanding circle of World English.

Also, Syarif et al. (2023) in their study analyzed the representation of culture and gender in visual and oral texts of English textbooks using EFL high school students. A content analysis of three EFL textbooks for junior high school students was carried out using Xiao's (2010) framework Small-C guides the analysis of the representation of culture. Also, a study by Bourgale and Cromer (2009) explores sexual characterization based on the roles listed in the book. The results showed that the most visual illustrations were presented primarily in lifestyle aspects, followed by habits, values, holidays, leisure and food. Also, gender representation was equally represented in the verbal text, but it is disproportionately represented in visual media. The results showed that Culture and gender awareness among students can be improved if the manuals have provided more balance representation of various cultures covering the source culture, target culture and international target culture and pay more attention to the treatment of floors.

Rouaghe, et al. (2023) reported the results of the textbook analysis in order to determine what type of cultural content is represented in the English as a foreign language textbook "My Book of English", designed for first-year classes in Algerian middle school.

Two main research questions were selected to be addressed: 1) To what extent are cultures represented in the first-year middle school English as a foreign language textbook? And 2) which type is the culture dominated by the research manual? In this study, document analysis was used for data collection. This included studying the textbooks themselves as primary sources. The analysis of the manuals included the use of content and cultural analysis, using existing frameworks to identify different elements and explore the cultural content that represents different cultural perspectives. Respectively, the findings revealed that the majority of the culture content is source (local), followed by a non-specific source of culture that has no reference to any particular culture, whereas target/international cultures are barely represented and an unequal representation of Big 'C' and small 'c' culture types is very noticeable. The research findings aimed to contribute to the existing body of knowledge by informing curriculum design and development and providing insights for other researchers to build upon this research by expanding the scope. Moreover, the results provided valuable information and guidance to help EFL teachers to reflect on their own teaching practices, which in turn encourages textbook developers to find remedies and ensure equal representation of original and non-original cultural expressions. Goals to help students successfully develop intercultural communication skills/international culture avoid communication breakdowns and culture shocks.

Zhang et al. (2024) examined the representation of cultures through three sets of national English manuals currently used in China by performing a synchronic content analysis to explore what cultures are represented in manuals. The analysis of the data was carried out on the basis of a newly constructed framework focused on content (countries and categories) and forms of cultural representation. Our results mainly indicate that American and British cultures dominate in the culture of inner circle countries and international culture is the least represented in all three textbooks, while Chinese culture is more represented than the cultures of inner circle countries in two sets of textbooks. Regarding cultural categories, the representation of cultural products is the highest, and cultural perspectives and cultural communities are the least represented in all three sets of textbooks. With regard to forms of cultural expression, cultural expression in implicit forms was more important than cultural expression in explicit forms, albeit to a varying extent. Based on the results, suggestions are provided for EFL textbook authors, EFL teachers, and textbook researchers.

Hoa et al. (2024) stated that many English manuals designed locally designed as EFL with cultural content integrated in preparation for the multiple cultural goals of the new EFL program in General Education in Vietnam. Purpose: The purpose of this research was to study cultural ideas in the EFL manual implemented in the last 10 years. This study followed a qualitative descriptive approach, emphasizing a structured but in-depth analysis of cultural content and intercultural interactions. The results of the content analysis revealed that (1) The manual includes a variety of international, local and target cultural content to ensure diversity and interculturality in the objectives of EFL education, and (2) the Presence of intercultural interactions falls below expectations in terms of quantity and quality. Textbook authors were also encouraged to contextualize cultural content and design tasks to allow learners to personalize their knowledge, experiences, and cultural perspectives. If simplicity and accessibility are the values pursued in textbooks, EFL teachers should be the ones to modify lessons to

enrich cultural content and deepen intercultural debates, aiming to promote learners' intercultural communicative competence as an objective of EFL teaching.

3. Research Questions

Concerning the objective of the current study, the following research question was addressed:

RQ. Does metadiscourse markers instruction have any significant effects on improving ESP learners' business letter writing skills?

4. Method

4.1. Research Design

This study employed a quasi-experimental design to explore the impact of metadiscourse marker (MDM) instruction on enhancing the writing performance of ESP learners in the context of business letters. A pre-test and post-test format with experimental and control groups was used. While the participants were not randomly selected, they were randomly assigned to the two groups, making this design appropriate for educational settings with intact classes. The independent variable in this study was the instruction of metadiscourse markers, and the dependent variable was the learners' business letter writing performance. This design facilitated a comparative analysis of the groups, enabling an evaluation of the instructional intervention's effects. The use of pre- and post-tests allowed the researchers to assess changes in writing proficiency, ensuring that observed differences were attributable to the instructional treatment.

4.2. Participants

The sample comprised 60 ESP learners aged between 20 and 32 years, all of whom were studying Business Administration at Payam Noor University-Rey Branch. The participants were selected through convenience sampling from available intact classes. To ensure uniformity in language proficiency levels, the Preliminary English Test (PET, 2007) was administered to all 60 participants. The PET is a standardized tool that evaluates competencies in reading, writing, listening, speaking, grammar, and vocabulary. For this study, only the sections on reading, listening, and grammar were used to maintain objectivity in scoring.

4.3. Instruments

To gather comprehensive data and ensure valid and reliable measurement of the variables, two main instruments were utilized:

4.3.1. Preliminary English Test (PET)

The PET (2007) was employed to assess the language proficiency of the participants and ensure their homogeneity before the intervention. The test evaluates four skills: reading, writing, listening, and speaking, alongside grammar and vocabulary. However, for the purpose of this study, only the reading, listening, and grammar sections were administered, excluding writing and speaking due to the subjective nature of their scoring. The internal reliability of the PET was verified using the KR-21 formula, resulting in a coefficient of 0.91, indicating high reliability. The standardized nature of the PET provided an objective measure to select participants with a similar level of language proficiency.

4.3.2. Business Letter Writing Tasks

Business letter writing tasks were used as both the pre-test and post-test to measure the participants' writing abilities. The tasks involved writing letters in a formal, professional context, such as applications to foreign universities or complaint letters. For the pre-test, students in both groups were asked to write a letter based on a prompt provided by the researchers. This initial task aimed to assess the participants' baseline knowledge of business letter writing conventions before the treatment.

After the instructional phase, the post-test consisted of a different set of business letter writing tasks, with a focus on complaint letters. The letters were assessed by two certified IELTS examiners using a standardized rubric that emphasized the structure, coherence, and use of metadiscourse markers in business writing. This dual evaluation process aimed to reduce bias and increase the reliability of the scoring.

4.4. Data Collection Procedure

The procedure was conducted in four stages:

1. **Initial Screening:** The PET was administered to all participants, and scores within one standard deviation of the mean were used to select the final sample ($n = 60$). These participants were randomly divided into an experimental group ($n = 30$) and a control group ($n = 30$).
2. **Pre-Test:** Both groups completed a business letter writing task as the pre-test. This assessed their baseline performance and confirmed there were no significant differences between the groups.
3. **Instructional Intervention:**

Experimental Group: Participants received explicit instruction on the use of metadiscourse markers over eight 90-minute sessions. They were exposed to annotated examples of business letters, highlighting both interactive markers (e.g., transitions, frame markers) and interactional markers (e.g., hedges, boosters). Practice tasks were provided, and individualized feedback focused on improving coherence and reader engagement.

Control Group: Participants practiced business letter writing using traditional methods, focusing on general structure and content without specific emphasis on metadiscourse markers.

4. **Post-Test:** After the intervention, both groups completed a post-test to evaluate the instructional impact by comparing pre- and post-test performances.

4.5. Data Analysis

SPSS version 26 was used to analyze the data. Descriptive statistics summarized participants' performances. Independent samples t-tests compared the mean scores of the experimental and control groups, while paired samples t-tests examined within-group progress from pre- to post-test. Cohen's d was calculated to determine the effect size, with values above 0.5 indicating meaningful instructional effects.

4.6. Ethical Considerations

The study adhered to ethical guidelines, ensuring participants' rights and well-being were protected. Informed consent was obtained, and participation was voluntary. Anonymity and confidentiality were maintained throughout. The research protocol was approved by the institution's Ethics Committee to ensure compliance with ethical standards.

The choice of the Preliminary English Test (PET) as the tool for homogenizing participants was based on its widespread recognition as a reliable and valid assessment of intermediate-level language proficiency. Its standardized nature and detailed evaluation of core linguistic skills make it an ideal instrument for ensuring the comparability of participants' abilities. The high internal reliability coefficient (0.91) confirmed its suitability for this research context.

The rationale for selecting business letter writing tasks, including complaint letters, stems from their practical relevance to the ESP learners' field of study. These tasks align with the learners' academic and professional goals, providing an authentic context for the application of metadiscourse markers. Complaint letters, in particular, were chosen for the post-test due to their emphasis on formal tone, clear structure, and persuasive language—elements where metadiscourse markers play a crucial role. Including examples of prompts used in the pre- and post-tests in an appendix enhances transparency and replicability, allowing readers and researchers to better understand and evaluate the tasks' design. These prompts were crafted to reflect realistic scenarios, encouraging learners to engage with the content meaningfully.

Efforts were made to ensure the validity and reliability of the study's findings. The use of the PET as a standardized measure and the application of dual scoring by certified IELTS examiners minimized bias and enhanced the objectivity of the data. The consistency in rubric-based evaluations across the pre- and post-tests further strengthened the reliability of the scoring process. The experimental design, which incorporated both pre- and post-tests, provided robust data for analyzing changes in performance attributable to the instructional intervention. By combining these methodological considerations, the study aimed to offer credible and actionable insights into the role of metadiscourse marker instruction in improving business letter writing skills.

5. Results

5.1. Reliability Statistics

As explained previously, three instruments were used in this study: PET, business letter writing pre-test, and business letter writing post-test. As seen in Table 1, the reliability index of PET, comprising 50 items, was computed using KR-21 method and turned out to be 0.91 in the pilot study done by 30 upper-intermediate ESP learners who had similar characteristics with the main sample of the study. Furthermore, Table 1 manifests that the inter-rater reliability values for business letter writing pre-test and post-test, consisting of 1 item each, were estimated 0.83 and 0.85 respectively via Pearson Product Moment Correlation Coefficient between the two raters who scored the essays using Kamariddinovna's TEEP Attribute Writing Scales (Kamariddinovna, 2024).

Table 1

Reliability Statistics of the Research Instruments

Instrument	No. of Items	Reliability Method	Reliability Index
PET	50	KR-21	0.913
Business letter writing pre-test	1	Inter-rater	0.828
Business letter writing post-test	1	Inter-rater	0.856

5.2. Homogeneity Test Results

PET was administered to 87 participants to select homogeneous upper-intermediate participants. The descriptive statistics, as represented in Table 2, indicates that the mean, median and mode of the PET scores before homogenizing were 27.55, 27, and 32 respectively.

Table 2

Descriptive Statistics for PET Score before Selection (Scores out of 50)

N	Mean	Median	Mode	SD	Skewness Ratio	Kurtosis Ratio
87	27.55	27	32	9.66	0.771	-1.217

Based on the results of PET (Table 2), from among 87 students, those 60 students whose scores were one standard deviation ($SD = 7.96$) minus and plus the mean (scores between 20 and 36) were picked up as homogeneous upper-intermediate participants for the present study. Also, Table 6 shows that the normality of the scores is proved as the ratios of skewness and kurtosis over their respective standard errors do not exceed the ranges of ± 1.96 . Figure 1 displays the distribution of the PET scores before homogenizing on a normal curve.

Figure 1

Histogram of PET Scores before Selection

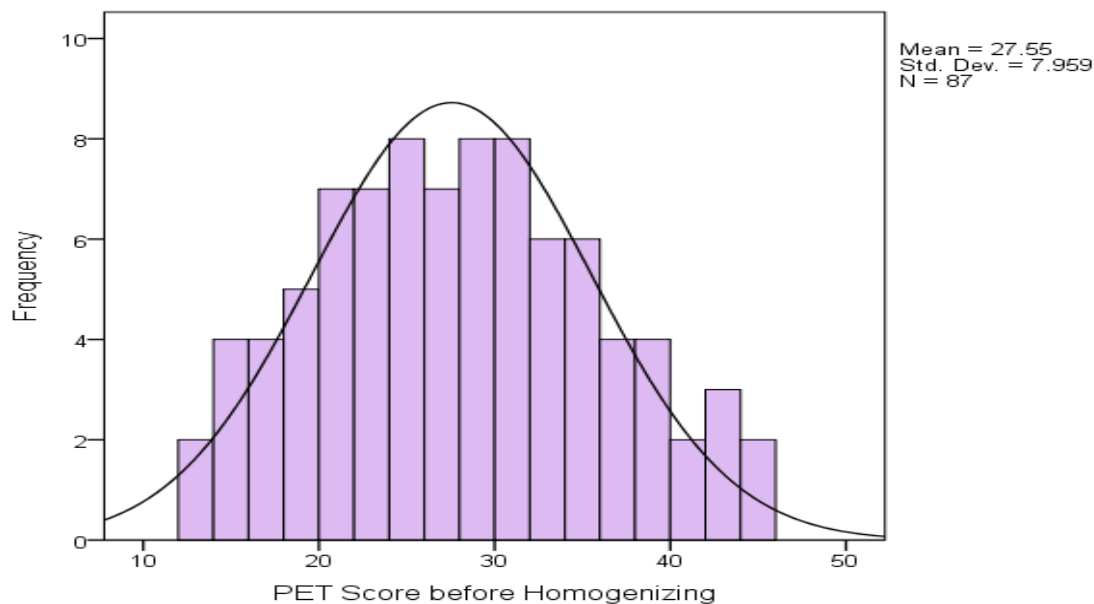


Table 3 represents the descriptive statistics for PET score ($N = 60$) after homogenizing. The table demonstrates that the mean, median and mode of the PET scores after homogenizing were 27.72, 28, and 32 respectively.

Table 3

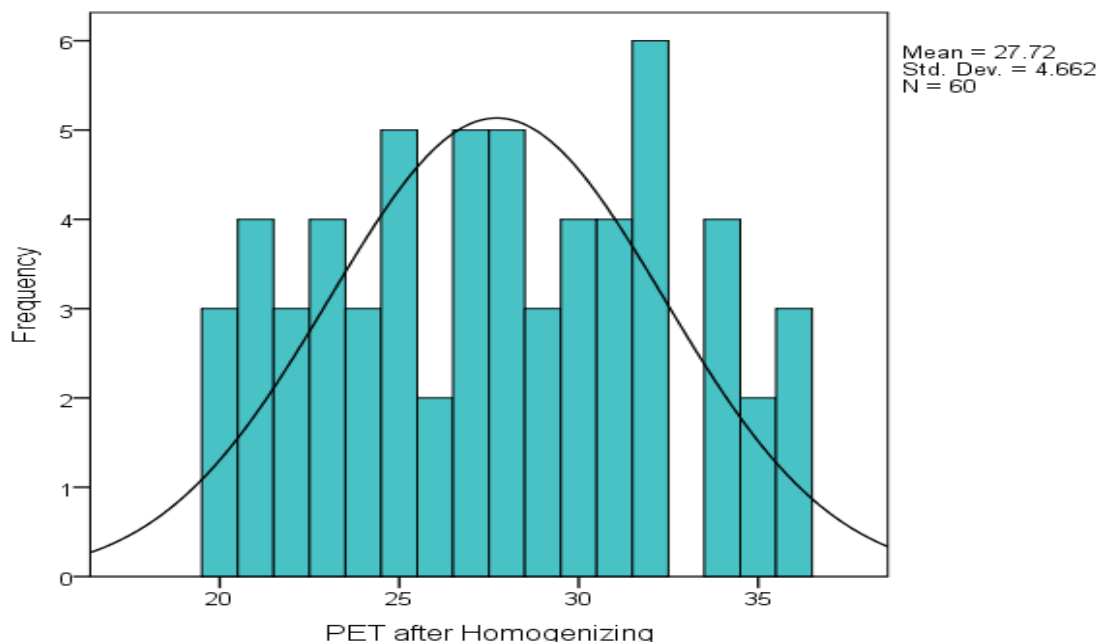
Descriptive Statistics for PET Score after Selection (Scores out of 50)

N	Mean	Median	Mode	Std. Deviation	Skewness Ratio	Kurtosis Ratio
60	27.72	28.00	32	4.66	0.168	-1.705

The distribution of the PET scores before homogenizing was drawn on a normal curve (Figure 2).

Figure 2

Histogram of PET scores after Selection



5.3. Main Results

The research question of the present study sought to see if metadiscourse markers instruction has a significant effect on ESP learners' business letter. Analysis of Covariance was used to examine this research question. As Pallant (2013) believes, ANCOVA is used when we have a two or more-groups pre-test/post-test design e.g., comparing the impact of different interventions (metadiscourse markers instruction in this study), taking before and after measures for each group. The scores on the pre-test (business letter writing scores in this study) are dealt as a covariate to control for pre-existing differences between the groups.

According to González-Fernández (2024), the assumptions of linearity, homogeneity of variances, and homogeneity of regression slopes must be checked before performing ANCOVA. The results of checking the assumption of linear relationship between the dependent variable (post-test of business letter writing) and the covariates (pre-test of business letter writing) are displayed in Figure 3. As shown in the scatter plot, there are two straight lines between the pre-test (covariate) and post-test scores representing the two groups of the study. These straight lines indicate that the linearity assumption was not violated.

Figure 3

Scatter Plot for Business Letter Writing Scores in the Two Groups (Pre-Test & Post-Test)

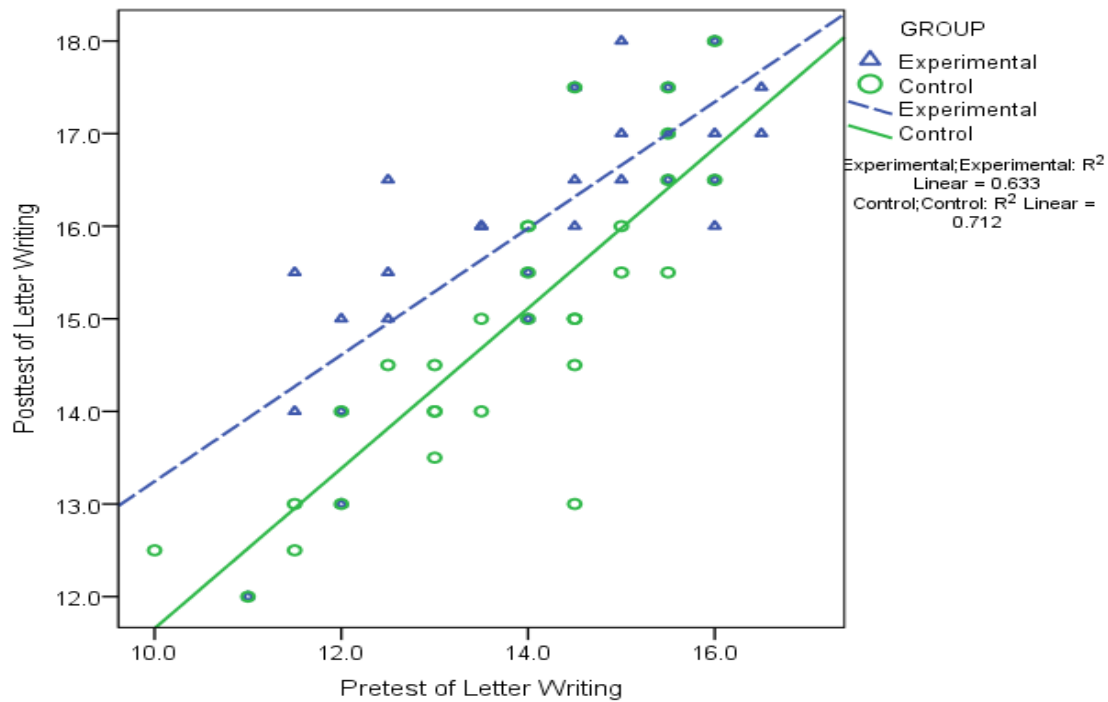


Table 4 indicates that the significant value associated with Levene’s test (0.76) exceeded the selected significant level (0.05) and so the homogeneity of variance assumption was not violated for business letter writing scores in the two groups.

Table 4

Levene's Test of Equality of Error Variances for Business Letter Writing Scores by Group

Levene Statistic	df1	df2	Sig.
0.093	1	58	0.762

The fourth assumption relates to homogeneity of regression slopes. As set forth in Table 5 below, the results indicated that the significance level of the interaction (Group * Pre-test) between group and the pre-test of total business letter writing was above 0.05 ($F(1, 56) = 1.61, p = 0.21, p > 0.05$) and therefore not statistically significant. That means the conclusion that the pre-test and post-test of business letter writing scores in the two groups enjoyed the assumption of homogeneity of regression slopes.

As all assumptions were met, one-way ANCOVA was decided to be applied to compare the effectiveness of metadiscourse markers instruction on business letter writing. The independent variable is type of teaching business letter writing (Group), and the dependent variable is business letter writing. Participants' scores on the pre-test of business letter writing are used as the covariate in this analysis.

Table 5

Homogeneity Test of Regression Slopes for the Effect Metadiscourse Markers Instruction on Business Letter Writing

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	109.736	3	36.579	47.738	0.000	0.719
Intercept	17.014	1	17.014	22.205	0.000	0.284
Group * Pre-test	1.231	1	1.231	1.606	0.210	0.028
Error	42.909	56	0.766			
Total	14490.250	60				
Corrected Total	152.646	59				

The number of students, mean, standard deviation, and standard error of means for the scores in the experimental and control groups were calculated (Table 6) before explaining the results of ANCOVA. Table 6 shows that the mean of business letter writing in the experimental group ($M = 14.08$, $SD = 1.66$) and control group ($M = 13.73$, $SD = 1.55$) are close to each other on the pre-test; however, the mean of business letter writing in the experimental group ($M = 16.03$, $SD = 1.42$) is much higher than the mean in the control group ($M = 14.88$, $SD = 1.59$) on the post-test. It should be noted here that the scores are the averages of the two raters' scores who rated the business letters.

Table 6

Descriptive Statistics of Business Letter Writing Scores on Pre-test and Post-test by Group (Scores are Averages of the Two Raters)

Test	Group	N	Mean	SD	SEM
Pre-test	Experimental	30	14.08	1.66	0.303
	Control	30	13.73	1.55	0.284
Post-test	Experimental	30	16.03	1.42	0.260
	Control	30	14.88	1.59	0.291

In order to depict the results of both pre-test and post-test for both groups in terms of business letter writing, a Line Chart (Figure 4) was made. As it is observable from the Line Chart, the means of business letter writing in the experimental and control groups are almost at the same level on the pre-test, still, on the post-test, the mean for the control group is considerably higher than the experimental group. In fact, the figure shows that both groups have progressed from pre-test to post-test but, the experimental group's improvement is greater than that of the control group.

Figure 4

Line Chart for Two Groups' Means of Business Letter Writing (Pre-Test & Post-Test)

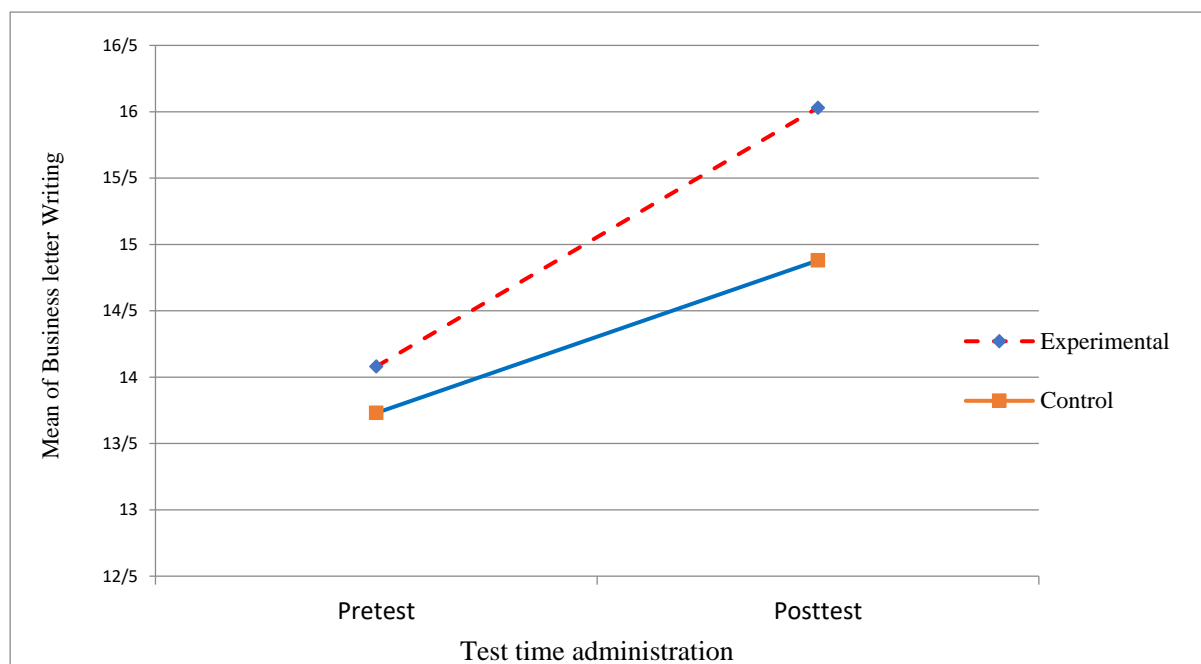


Table 7 summarizes the results of ANCOVA. After adjusting for the business letter writing scores on the pre-test, there was a significant difference between the two groups' business letter writing scores on the post-test, $F(1, 57) = 14.86$, $p = 0.001$, $p < 0.05$, partial eta squared = 0.21; as a result, it can be claimed that metadiscourse markers instruction improves ESP learners' business letter. Moreover, as evident from Table 7, there was a strong relationship between the pre-intervention and post-intervention scores on the total business letter writing, as shown by a p value of 0.000, $F(1, 57) = 114.50$. That means the business letter writing scores gained on the pre-test affected the business letter writing scores gained on the post-test. Additionally, Table 7 shows that the partial eta squared (effect size) value is 0.67.

Table 7

ANCOVA: Tests of Between-Subjects Effects of Metadiscourse Markers Instruction on Business Letter Writing

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	108.505	2	54.253	70.058	0.000	0.711
Intercept	17.535	1	17.535	22.643	0.000	0.284
Pre-test	88.668	1	88.668	114.500	0.000	0.668
Group	11.509	1	11.509	14.862	0.001	0.207
Error	44.140	57	0.774			
Total	14490.250	60				
Corrected Total	152.646	59				

6. Discussion

The objective of this study was to investigate the impact of explicit instruction in metadiscourse markers on the business letter writing skills of ESP learners. Metadiscourse markers, as linguistic tools, play a pivotal role in guiding readers through text, structuring arguments, and enhancing clarity and coherence in writing. The findings provide robust evidence that such instruction significantly improves learners' writing performance. This section critically evaluates the study's findings, contextualizes them within existing literature, and addresses their pedagogical implications, limitations, and potential cultural factors, while suggesting avenues for future research.

Does metadiscourse markers instruction have any significant effects on improving ESP learners' business letter writing skills?

The findings suggest a positive answer to this question, revealing that metadiscourse markers instruction had a significant impact on the participants' performance in writing business letters. The experimental group, which received explicit instruction on using metadiscourse markers, demonstrated better organization, clarity, and coherence in their writing compared to the control group. This section delves into a detailed interpretation of the results, compares them with previous studies, and discusses the broader implications. The findings of this study indicate that the explicit teaching of metadiscourse markers can significantly enhance ESP learners' ability to write business letters. Business letters, which require a high degree of formality and clarity, benefit from the use of metadiscourse markers as they aid in structuring arguments, signposting ideas, and conveying the writer's stance effectively. In the current study, the participants who received metadiscourse instruction were better equipped to employ linguistic devices such as transitions, hedges, boosters, and frame markers. These elements contributed to a more cohesive and persuasive writing style, aligning with the needs of formal communication. One notable outcome was the improvement in coherence and reader engagement. The learners in the experimental group were more adept at employing interactive metadiscourse markers, such as transitions (e.g., however, therefore), and interactional markers like hedges (e.g., possibly, might), which allowed them to present their arguments with greater nuance and clarity. This suggests that the explicit teaching of these devices enhances not only the structural aspects of writing but also its rhetorical effectiveness, making the text more engaging and reader-friendly.

In response to the research question, the findings of this study provide strong evidence that metadiscourse markers instruction significantly improves ESP learners' ability to write effective business letters. The improvements observed in the experimental group's performance can be attributed to their increased awareness and strategic use of metadiscourse markers. By integrating these linguistic tools, learners were able to construct texts that were more coherent and better suited for formal written communication.

The results indicate that explicit instruction in metadiscourse markers significantly enhanced the participants' ability to write coherent and effective business letters. Learners in the experimental group demonstrated a superior command of transitions, hedges, boosters, and frame markers, which contributed to the clarity, persuasiveness, and overall effectiveness of their writing. This aligns with the findings of Yoon (2021), who also reported substantial improvements in the written performance of ESP learners following explicit instruction in metadiscourse markers. These outcomes underscore the importance of targeted instruction in equipping learners with the linguistic tools necessary for formal communication.

The current study highlights a unique finding: learners' enhanced use of interactional markers, such as hedges (e.g., *might*, *possibly*), and interactive markers, such as transitions (e.g., *however*, *therefore*). These markers allowed the writers to present their arguments with greater nuance and rhetorical finesse. Such outcomes extend beyond previous research by offering a deeper understanding of how these linguistic features influence not just the structural but also the rhetorical effectiveness of business writing.

The findings hold significant pedagogical value, particularly in ESP contexts where learners are required to master formal written communication. Integrating metadiscourse instruction into ESP curricula can enhance learners' capacity to write more cohesive, audience-focused texts. Business letters, which demand high levels of clarity and formality, particularly benefit from this approach. This study emphasizes the necessity of explicit instruction as opposed to implicit methods, corroborating the conclusions of Alavinia and Aftabi (2013), who argued for the superiority of explicit approaches in teaching metadiscourse markers.

AI tools offer a promising complement to traditional teaching methods in this domain. These tools can provide immediate feedback on learners' use of metadiscourse markers, enabling more personalized learning experiences. For instance, AI-driven writing platforms could analyze the frequency and appropriateness of marker usage in real time, fostering greater learner autonomy and self-regulation. By incorporating AI into instruction, educators can support learners in developing their writing skills more efficiently and effectively.

Cultural factors may also influence the effectiveness of metadiscourse marker instruction. In collectivist cultures, such as Iran, where this study was conducted, the emphasis on indirectness and formality in communication may shape how learners perceive and use metadiscourse markers. For example, the preference for hedging and softening language to maintain harmony and avoid confrontation might make these linguistic features more salient in learners' writing. Future research should explore how cultural norms and communication styles affect the adoption and utilization of metadiscourse markers in ESP contexts.

While the study provides valuable insights, several limitations must be acknowledged. The use of convenience sampling restricts the generalizability of the findings, and the focus on business letter writing tasks limits the scope of application to other writing genres. Future studies could address these limitations by incorporating more diverse participant samples and exploring the effects of metadiscourse instruction across various genres, such as academic essays, reports, and creative writing.

Additionally, the integration of AI-driven tools warrants further investigation. Future research could examine the efficacy of combining explicit instruction with AI-based interventions, exploring their impact on learners' performance and engagement.

This study makes a notable contribution by demonstrating the unique benefits of explicit metadiscourse marker instruction in the context of business letter writing. Unlike previous research, which has predominantly focused on academic or narrative writing, this study highlights the relevance of metadiscourse instruction in professional genres. The results align with prior findings by Esfandiari and Allaf-Akbary (2024) and Tahmasbi et al. (2024), extending their conclusions to the formal business writing domain.

Furthermore, the findings resonate with those of Qassim Ali (2016), who emphasized the role of metadiscourse markers in improving academic writing among ESP learners. By highlighting the transferability of these linguistic tools across writing genres, this study reinforces their value as a core component of language instruction.

In summary, this study underscores the pedagogical potential of explicit metadiscourse marker instruction for enhancing ESP learners' business writing skills. The findings not only corroborate previous research but also offer new insights into the nuanced effects of such instruction on writing performance. By integrating explicit metadiscourse instruction and leveraging AI tools, educators can better prepare learners for the demands of academic and professional communication.

7. Conclusion and Implications

This study investigated the impact of explicit metadiscourse marker instruction on enhancing ESP learners' ability to write business letters, focusing on a relatively underexplored aspect of language education. The statistical analyses revealed that teaching metadiscourse markers significantly improves the overall quality of learners' formal and professional writing. Both interactive and interactional metadiscourse markers were shown to enhance coherence, clarity, and persuasiveness, highlighting their critical role in organizing ideas, aligning with reader expectations, and expressing authorial stance in formal writing contexts.

The findings have important implications for language teaching and curriculum development. Integrating metadiscourse marker instruction into ESP curricula could move instruction beyond grammar-focused approaches, emphasizing rhetorical strategies and discourse-level features that are essential for professional and academic writing. As Hyland (2005) posits, metadiscourse facilitates effective communication by helping writers structure information, guide readers, and convey attitudes persuasively. The results of this study support the inclusion of explicit metadiscourse instruction, particularly for teaching formal and business writing.

Actionable Recommendations for Educators

To implement these findings effectively, educators are encouraged to:

Incorporate Metadiscourse Instruction in ESP Curricula: Design modules that explicitly teach interactive markers (e.g., transitions and frame markers) and interactional markers (e.g., hedges and boosters) tailored to business writing tasks.

Adopt Rhetoric-Based Approaches: Shift from grammar-dominant instruction to practices that emphasize rhetorical strategies, enhancing learners' ability to craft reader-oriented texts.

Integrate Technology: Utilize AI-based tools such as intelligent writing assistants to provide real-time feedback on learners' use of metadiscourse markers, supporting self-directed improvement.

Implications for Teacher Training Programs

Effective integration of metadiscourse instruction requires well-prepared educators. Teacher training programs should: Provide workshops and resources that focus on teaching metadiscourse markers effectively in ESP settings. Train educators to adapt instruction to specific writing genres, such as business correspondence, ensuring learners meet the expectations of professional communication.

Several avenues for further investigation arise from this study: Future research should explore the long-term effects of metadiscourse marker instruction on learners' writing performance across various proficiency levels. Examine the efficacy of AI-powered tools in providing adaptive and personalized feedback on learners' use of metadiscourse markers. Investigate how cultural factors influence the use and teaching of metadiscourse markers, adapting instruction to diverse rhetorical traditions and linguistic backgrounds. This study makes a significant contribution to ESP pedagogy by demonstrating the effectiveness of metadiscourse marker instruction in enhancing learners' business writing skills. By fostering improved coherence, clarity, and engagement, these linguistic tools equip learners with essential skills for professional communication. Integrating metadiscourse instruction into ESP curricula, coupled with leveraging AI technologies, can create transformative educational practices. Future research should continue to explore innovative methods and cross-cultural applications, ensuring the broad applicability and sustainability of these instructional strategies.

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Authors' Contributions

All authors have conducted the study, collected data, analyzed and interpreted the data, and written up the manuscript.

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Competing Interests

The authors declare that there is no conflict of interest.

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