

The Effect of Teaching Metadiscourse Markers on the Coherence and Cohesion of Iraqi EFL Learners' Writing

Nadia Salal (Ferdowsi University of Mashhad) □

ah1306971@gmail.com

Associate Professor Zargham Ghabanchi* □

(Ferdowsi University of Mashhad, Corresponding author)

ghabanchi@um.ac.ir

Professor Assistant Sheghaygh Shayesteh Sadefiyyan □

(Ferdowsi University of Mashhad) □

Shayesteh@um.ac.ir □

Abstract

This study investigates the effect of teaching metadiscourse markers on the coherence and cohesion of Iraqi EFL learners' writing. Metadiscourse markers, including transitions, frame markers, hedges, and engagement devices, are crucial to lead readers and structure academic texts. The study adopted a quasi-experimental pre-test and post-test design, and it included 30 Iraqi intermediate-level university students. The experimental group received explicit instruction in metadiscourse markers for six weeks, while the control group received regular writing instruction without special instruction. The data were collected by writing tasks and analyzed quantitatively by SPSS for score comparison and qualitatively by thematic analysis of essay samples. The results indicated the experimental group's writing improved markedly, with higher scores in coherence and cohesion, higher use and range of metadiscourse markers, and improved organization of ideas. The qualitative analysis indicated that students developed higher awareness of how to guide readers through arguments and structure their texts in a coherent manner. Some students, however, demonstrated overuse or mechanical use of markers, suggesting the need for more practice. Thus, in total, the findings conclude that explicit instruction of metadiscourse enhances the academic writing skills in the EFL context, particularly for Iraqi students, thus having pedagogical implications on writing. **Key Words** Metadiscourse markers, coherence, cohesion, EFL learners, Iraqi students, writing skills

1. Introduction Cohesion and coherence in writing are the basic indicators of academic proficiency in EFL contexts, shaping how arguments are construed and evaluated by readers and raters alike (Diep & Diep, 2024, pp. 1–2). One of the main pedagogical drivers of these properties is overt instruction in metadiscourse markers—the reflexive language that writers use to organize texts, signal stance, and engage with readers (Hyland, 2018, pp. 43–44, 57–58). In Hyland's seminal model, metadiscourse comprises interactive resources (e.g., transitions, frame markers, endophorics, evidentials, code glosses) that organize the text for the reader, and interactional resources (e.g., hedges, boosters, attitude markers, self-mentions, engagement markers) that negotiate writer–reader relationships and stance (Hyland, 2018, pp. 8, 57–58). These resources are directly connected with readers' impression of coherence (logical connection) and cohesion (surface connection), and thus with the overall quality of writing (Hyland & Jiang, 2018, pp. 20–22; Diep & Diep, 2024, pp. 2–3). Recent empirical studies demonstrate that when instructed to attend to and employ metadiscourse as a strategic device, especially interactional markers, EFL writers produce more well-structured and better reader-oriented writing in terms of argumentation (Esfandiari & Allaf-Akbary, 2024, pp. 11–13). Meanwhile, studies in the Iraqi EFL context show uneven acquisition and utilization of these devices: upper undergraduate students are shown to overutilize certain transitions and frame markers, and fail to utilize evidentials, code glosses, and engagement markers, behaviors which are positively correlated with lower writing scores and self-and teacher-reported difficulties in cohesion (Abdaloussein, 2022, pp. 1089–1092). Augmentation of intervention research further suggests that direct teaching of discourse/metadiscourse markers can enhance the knowledge without their immediate transfer to

overall writing scores unless with large amounts of practice and feedback (Al Issa et al., 2024, pp. 124–126, 134–136). Overall, the volume of literature reports an applied deficit: Iraqi EFL writers need explicit systematic training with a focus on metadiscourse functional use in building academic writing cohesion and coherence.

1.1 Problem Statement Even as the application of coherence and cohesion is of immeasurable worth in assessing scholarly writing, Iraqi EFL learners tend to exhibit restricted and even improper utilization of metadiscourse markers, and this results in poor textual organization and less firm stance (Diep & Diep, 2024, pp. 1–3; Abdalhussein, 2022, pp. 1088–1092). While instruction in Iraq generally emphasizes grammar and vocabulary, it gives comparatively little direct instruction in the interactive and interactional resources through which writers control arguments and answer claims (Abdalhussein, 2022, pp. 1091–1092). Recent interventions show that instruction of discourse/metadiscourse markers strengthens knowledge, yet the immediate effect on coherence/cohesion yields Iraqi students' writing is under-explored and under-documented (Al Issa et al., 2024, pp. 134–136). This study bridges that gap by exploring whether the teaching of metadiscourse markers can effectively boost the coherence and cohesion of Iraqi EFL learners' academic writing, as reflected in analytic scores and text-based indices.

1.2 Research Objectives

1. To explore the starting-point use of interactive and interactional metadiscourse markers in Iraqi EFL learners' academic essays.
2. To create and provide clear instruction for key metadiscourse functions relating to coherence and cohesion.
3. To evaluate the effect of instruction on student coherence and cohesion through rubric-based evaluation and text analysis.
4. To explore learners' attitudes towards how teaching metadiscourse influences their planning, organization, and audience engagement in writing.

1.3 Research Questions

1. What is the profile of Iraqi EFL learners prior to instruction in their use of metadiscourse in interactive and interactional categories?
2. Does explicit instruction in metadiscourse markers significantly improve the coherence and cohesion of students' academic essays?
3. What categories of metadiscourse (interactive vs. interactional) show the most improvement following instruction, and how are these improvements connected to rubric areas of coherence and cohesion?
4. How do students perceive the value of metadiscourse instruction in the structuring of argument and addressing the reader in academic writing?

2. Literature Review

2.1 Metadiscourse, Coherence, and Cohesion in EFL Writing

Metadiscourse has been recognized for a long time as one of the most powerful rhetorical devices applied in academic discourse, as it provides authors with linguistic resources to guide readers through texts, negotiate stance, and perform a writer–reader negotiation. Hyland (2018, pp. 43–44) defines metadiscourse as those language features that "organize the discourse, engage readers, and signal the writer's attitudes and assumptions." His model has become the most used model in applied linguistics for the analysis of metadiscourse. It distinguishes between interactional markers—such as transitions, frame markers, endophoric markers, evidentials, and code glosses—that assist in the structuring of discourse and facilitating understanding, and interactional markers—which include hedges, boosters, attitude markers, self-mentions, and engagement markers—that allow writers to signal subjectivity, establish credibility, and engage readers (Hyland, 2018, pp. 57–58). The significance of metadiscourse is that it has strong relations with coherence and cohesion, two notions supporting effective academic writing. Coherence is the logical organization of ideas and the sense of general coherence that readers attain when following a text (Connor & Johns, 1990, p. 27). Cohesion, on the other hand, addresses the surface-level text relations that hold together sentences and clauses, such as conjunctions, reference, and lexical repetition (Halliday & Hasan, 1976, p. 4). Diep and Diep (2024, pp. 2–3) emphasize that while cohesion is a linguistic property of a text, coherence is ultimately a cognitive process through which readers can interpret ideas' relations. Metadiscourse is therefore the "bridge" between the two: the linguistic support that enables readers to construct coherent meaning from cohesive links. Empirical research substantiates this link. Esfandiari and Allaf-Akbary (2024, pp. 11–13) demonstrated that interactional metadiscourse training in an explicit manner—particularly hedges, boosters, and engagement markers—enabled EFL students to produce texts that were more reader-oriented and rhetorically persuasive. Similarly, Hyland and Jiang (2018, pp. 21–22)

pointed out that in disciplinary academic writing, we have seen a remarkable surge in the use of engagement markers such as you can see or we argue, which is consistent with an overall movement towards dialogic, audience-directed discourse in world academia. However, in the Middle Eastern EFL environment, it was discovered that students underuse the complete range of metadiscourse markers. Abdalhussein (2022, pp. 1089–1091) pointed out that Iraqi students overuse a limited set of additive and sequential transitions (e.g., second, first, therefore) and have limited control over evidentials, code glosses, and interactional devices. This causes essays to appear sentence-by-sentence structurally organized but lacking in substance regarding rhetorical stance and engagement of readers. Such inclinations emphasize the need for focused instruction to counterbalance both textual and interpersonal aspects of metadiscourse.

2.2 Metadiscourse Research Gaps in Iraqi EFL Contexts

Although the application of metadiscourse to produce coherence and cohesion has been widely reported in world EFL contexts, investigation in the Iraqi EFL context is fragmented and underdeveloped. The majority of indigenous studies have been descriptive and focused on marker frequency counts rather than intervention outcomes. Abdalhussein (2022, pp. 1090–1092), for instance, reported the limited use of transitions and frame markers by Iraqi students' writing without evaluating the impacts of systematic instruction. Some pedagogical innovation has appeared on the horizon, such as flipped classroom methodologies and general discourse marker training (Al Issa et al., 2024, pp. 124–126). However, these have been used to measure broad writing performance gains, without controlling for coherence and cohesion as discrete variables. As a result, it is not clear whether writing fluency gains translate into improved rhetorical organization as well. Two significant gaps emerge from this review.

- Inadequate focus on cohesion and coherence as measurable outcomes. While global research has mostly attested to the role of explicit metadiscourse training in contributing to cohesion in texts (Esfandiari & Allaf-Akbary, 2024), few Iraqi researches have operationalized such constructs with proper pre- and post-intervention designs.
- Metadiscourse attitudes among students remain poorly researched. Other studies show that EFL learners' attitudes towards metadiscourse heavily influence the ways in which they acquire rhetorical strategies (Hyland & Jiang, 2018). Yet in Iraq, little research has been done to determine the ways students view metadiscourse as a communication tool, or if they believe its application is artificial, redundant, or empowering. These loopholes are particularly significant because coherence and cohesion are very highly valued in international testing systems such as IELTS, TOEFL, and national university writing grading criteria (Diep & Diep, 2024, pp. 2–3). Iraqi students, who typically prepare for such tests, stand to suffer if their rhetorical training does not include systematic focus on these features.

2.3 Theoretical and Methodological Innovations

The present research makes use of Hyland's (2018) interactional model of metadiscourse, which is now the most employed and empirically verified framework used in the field. The appealing aspect of this model is its double coverage of interactive and interactional functions and thus its ability to represent how writers deal with textual flow and interpersonal stance at once. Basing itself on this model, the research is theoretically aligned with worldwide scholarship to make it possible to contrast Iraqi findings with international tendencies more clearly. Methodologically, more and more one has to move beyond descriptive, qualitative accounts of marker use. More recent research suggests a mixed-methods design, with quantitative corpus-based and qualitative learner perception outcomes (Esfandiari & Allaf-Akbary, 2024, pp. 11–13), to be preferred. With this tested design, more can be known about how instruction influences not just the linguistic output (e.g., quantity and range of markers) but the learner experience (e.g., attitudes, difficulties, preferences). Unlike other Iraqi studies (e.g., Abdalhussein, 2022), which counted marker frequencies, the current study utilized the quasi-experimental method. Students' writing was pre- and post-tested with metadiscourse training using formal cohesion and coherence rubrics. Learners' feedback questionnaires were also administered to collect subjective opinions. This concurs with Al Issa et al. (2024, pp. 134–136), who call for triangulated research on applied linguistics for the sake of statistical findings being supported by pedagogical insight.

2.4 Closing the Gap

Synthesizing the above dialogues, this present study adds three definite enhancements to the literature:

- Ensuring that coherence and cohesion are explicit goals. This research is not alone in its approach to metadiscourse treatment compared to former Iraqi studies. Instead, it quantifies the effect of instruction on attainment of coherence and cohesion as tangible, measurable by-products of writing and therefore more transparent for pedagogy and testing.

- Positioning the teaching of metadiscourse in the Iraqi EFL context. Iraqi learners possess some challenges, including lack of exposure to native-like academic discourse, test-oriented pedagogy, and instruction-oriented pedagogy (Abdaloussein, 2022, pp. 1091–1092). Positioning instruction in this context, the study demonstrates how international models (e.g., Hyland's model) can be applied realistically for local interests.
- Blending learner attitudes and textual analysis. Through the quantitative writing scores and frequency counts combined with qualitative comment, the research adds a more holistic explanation of how learners use and perceive metadiscourse. This recognizes Hyland and Jiang's (2018, pp. 21–22) contention that rhetorical strategies cannot be clearly understood without surveying learners' orientations toward audience involvement. In bridging these gaps, the study aims to enhance existing metadiscourse knowledge in EFL writing and offer useful pedagogical recommendations for Iraqi and comparable learning contexts. Overall, through integrating theory, method, and practice, the study serves to facilitate enhanced academic writing pedagogy and learners' preparedness for high-stakes tests that value coherence and cohesion.

3. Methodology

3.1 Research Design

This study employs quasi-experimental design with pre-test and post-test writing activities in investigating the effect of teaching metadiscourse markers on the cohesion and coherence of Iraqi EFL students' writing. A quasi-experimental design is preferable because it allows researchers to contrast groups while being realistic about classroom conditions where the random allocation is not always feasible (Creswell & Creswell, 2018, pp. 222–223). The design enables performance changes to be brought about by the intervention, but without diminishing the ecological validity in the actual classroom setting. The study has two groups: experimental, to which there is explicit teaching on metadiscourse markers, and control, for which there is normal writing instruction. Both groups are given pre-test and post-test writing assignments, through which the researcher can measure changes in coherence and cohesion as a result of the treatment.

3.2 Data Collection

Participants

Participants are 30 Iraqi English as a Foreign Language (EFL) undergraduate students at the intermediate level of proficiency who were recruited from a public university English department. Intermediate students are selected because they already possess adequate grammatical and lexical skills but not efficient strategies for writing cohesive and coherent academic text (Abdaloussein, 2022, pp. 1089–1090). This group is of special concern in the context of Iraq, in which earlier work mentioned limited and disorderly use of metadiscourse markers (Al Issa et al., 2024, pp. 124–126).

Instruments

1. Writing Exercises: Pretest and posttest are also done by students in expository and argumentative essays. These genres are selected because they require explicit logical organization and appeal to the audience, both of which rely heavily on the use of metadiscourse (Diep & Diep, 2024, pp. 2–3).
2. Instructional Materials: The explicit instruction on metadiscourse markers is provided to the experimental group based on Hyland's (2018, pp. 57–58) model. Instruction covers transitions, frame markers, evidentials, hedges, boosters, and attitude markers with tasks to draw attention to interactive as well as interactional functions.
3. Grading Rubric: Essays are graded based on an analytic rubric of cohesion and coherence. Rubrics have been demonstrated to provide more reliable measures of certain writing sub-skills compared to holistic rating (Brown, 2015, pp. 147–149).
4. Example Texts (Corpus Analysis): Corpora analysis is used worldwide to a random sample of group essays, and frequency and range of metadiscourse markers are tabulated. Quantitative insight and qualitative understanding about instruction effect on writing practice are gained through this way (Esfandiari & Allaf-Akbary, 2024, pp. 11–13).

3.3 Data Analysis

Analysis is carried out based on mixed-methods approach

Quantitative Analysis: SPSS post-test and pre-test cohesion and coherence scores are statistically analyzed with ANCOVA and paired-sample t-tests. This informs us if intervention had enhanced writing (Cohen et al., 2018, pp. 761–763). Textual Analysis: Essays are annotated with metadiscourse markers according to the typology of Hyland (2018, pp. 57–58). Interactional vs. interactive markers' distribution patterns are compared and frequency

distributions between groups. This two-way process makes statistical optimization and adjustment possible in language-driven composition so that outcomes are rendered more plausible.

3.4 Analytical Framework The study relies on Hyland's (2018) model of metadiscourse markers, which characterizes them as interactional (i.e., transitions, frame markers, evidentials, code glosses) and interactive (i.e., hedges, boosters, attitude markers, self-mentions, engagement markers). The model is used most widely since it is broadly applicable to genre and educational level and has been used recently in EFL research (Hyland & Jiang, 2018, pp. 20–21; Esfandiari & Allaf-Akbary, 2024, pp. 11–13). By incorporating writing tasks into this system, the study closely investigates whether instruction results in more frequent use, appropriate use, and variety of metadiscourse. Qualitative analysis is done by combining quantitative rating information with linguistic qualitative information, and the outcome is rich description of how metadiscursive instruction results in more coherence and cohesion of Iraqi EFL writers' writing.

4. Results This section presents the results of the study based on the students' written texts before and after teaching metadiscourse markers. The qualitative and quantitative results are given.

4.1 Quantitative Results: Writing Scores Comparison of the writing scores of the students before and after the intervention indicated a very significant difference. The pre-test mean was 62.4 (SD = 6.8), whereas the post-test mean was 76.3 (SD = 7.2), which indicated an overall improvement in writing. A paired samples t-test found the difference to be significant at $p < 0.01$. Table 1 Mean Writing Scores of Learners Before and After Instruction

Test Type	Mean Score	Standard Deviation	N
Pre-Test	62.4	6.8	30
Post-Test	76.3	7.2	30

The findings indicated that explicit instruction of the metadiscourse marker enhanced learners' text production of cohesion and coherence. So did Hyland (2005, p. 30) since metadiscourse renders the text more readable and effective, and Jalilifar (2010, p. 30) who found that EFL learners instructed in textual markers scored higher than the uninstructed ones.

4.2 Frequency and Distribution of Metadiscourse Markers

Corpus analysis of student essays proved the strong rise in frequency and scope of metadiscourse markers after instruction. Students used 12.3 markers per 250 words on the pre-test, which were mainly linked with simple connectors (and, but, so). Average increased to 27.8 markers for every 250 words during the post-test with greater variety being transitions (however, therefore, in contrast), frame markers (first, finally, in conclusion), and interactional markers (I believe, it seems, we can argue). Table 2 Frequency of Metadiscourse Markers in Learners' Writing

Category	Pre-Test (Total)	Post-Test (Total)	Percentage Increase
Transitions (e.g., however)	45	89	+98%
Frame markers (e.g., first)	22	54	+145%
Endophoric markers	10	28	+180%
Evidentials (e.g., according to)	8	20	+150%
Code glosses (e.g., for example)	12	34	+183%
Hedges (e.g., might, could)	15	33	+120%
Boosters (e.g., clearly)	5	14	+180%
Engagement markers (e.g., you can see)	6	19	+216%

The improvement is evidence of how students are more attuned to the construction of arguments and how to persuade readers. It is a support for Crismore, Markkanen, and Steffensen's (1993, p. 48) claim that successful use of metadiscourse signals relations among ideas. Iraqi students had used mainly additive markers but demonstrated signaling extension to causal and contrast markers following training (Abdollahzadeh, 2011, p. 68).

4.3 Qualitative Observations: Improvements and Challenges

Qualitative analysis revealed breathtaking improvement in text cohesion and coherence. Writing samples post-test revealed greater paragraph coherence, smoother transition between paragraphs, and more overt stance marking. Students began using frame markers (earlier, on the contrary, in conclusion) to organize essays more logically with no abrupt topic change. There were still some issues: Some of the markers (e.g., because, therefore) were overused by some students to the point of redundancy. Others made unwarranted use of contrast markers

(although, however), sometimes producing ambiguity. Table 3 Themes Emerging from Learners' Writing and Observations

Theme	Example from Learners' Writing	Interpretation
Improved use of transitions	"However, the results were not clear."	More accurate marker use after training.
Overgeneralization of markers	"Firstly, secondly, thirdly, finally" in nearly every essay	Heavy reliance on formulaic markers.
Increased reader awareness	"As you can see, this shows..."	Greater rhetorical awareness of audience.

These findings mirror Hyland and Tse's (2004, p. 172) contention that learners are struggling with interactional markers, which require not only linguistic ability but also pragmatic acumen. According to Hyland (2017, p. 28), learning metadiscourse is less a function of adding markers and more about cultivating rhetorical sensibility.

5. Discussion This section explains the findings in the context of the research questions, theoretical concepts, and previous studies. It shows how direct teaching of metadiscourse markers assisted Iraqi EFL learners' cohesion and coherence in writing and explains the surprising findings based on the data analysis.

5.1 Interpretation of Findings with Reference to Research Questions The first research question asked whether teaching metadiscourse learning of markers enhances the coherence of students' writing. Quantitative and qualitative results of the analysis showed that the students significantly improved in applying transition markers, frame markers, and evidential markers to structure and support arguments. Students progressed from employing single-word transitions such as *or* and *but* to the use of more sophisticated transitions such as *however*, *therefore*, *in contrast*. This demonstrates greater emphasis on the organisation of argument in a structured way for easier tracing by readers of the order of reasoning. These findings support Hyland's (2005, p. 49) argument that metadiscourse serves a central function towards directed reader reception in a text by signalling logical relations and rhetorical options that provide for intelligibility. They also affirm Crismore, Markkanen, and Steffensen (1993, p. 40), who asserted that metadiscourse markers equip writers with adequate tools to facilitate the explanation of connection of ideas and make text more readable. Increased coherence in Iraqi EFL learners indicates that explicit teaching is highly suitable where students cannot be subjected to actual samples of academic discourse, and hence scaffolding teaching is inevitable. The second one asked how, and whether, to instruct metadiscourse in an effort to make students more proficient at writing more coherent. Outcomes indicated that the students performed better in employing connective devices more effectively—additive (in addition, moreover) and contrasting (on the other hand, although) markers—to generate logically coherent paragraphs. This finding upholds Halliday and Hasan's (1976, p. 227) initial theory of cohesion that cohesive relations like reference, substitution, ellipsis, and conjunction are critical textual coherence. Improved utilization by students of sophisticated cohesive devices following training illustrates not merely use knowledge but productive use in sense construction among sentences and paragraphs. In general, the findings confirm the research general hypothesis: that instructor-led teaching of metadiscourse markers will lead to enhanced sensitivity and productive use in using cohesive and coherent strategy to composition.

5.2 Contribution to Literature and Pedagogical Implications

Findings of the current study are of great significance to metadiscourse writings of EFL. The majority of previous studies have underlined the general significance of metadiscourse in scholarly texts (Hyland, 2007, p. 163), yet further studies have not been specialized in its significance in the context of Iraqi EFL, where excessive use, inappropriate use, or absence of cohesive devices are usually called into question (Al-Khazraji, 2019, p. 15). By providing evidence that explicit instruction may lead to measurable improvement in cohesion and coherence, the study expands the external validity of the results to a new linguistic and cultural environment. Pedagogically, it is quite evident from the research that systematic teaching of metadiscourse needs to be integrated into writing instruction by EFL writing instructors. More importantly, instruction has to go beyond explicit repetition of transitional words but also on text functions (discourse organization, interlinking ideas) and interpersonal functions (stance marking, to engage readers). A clear instance is showing students how to use hedges (*may*, *might*) and boosters (*obviously*, *undoubtedly*) so that they can walk the tightrope of caution and assertiveness of argument and thus create improved texts. This is a suggestion instead of Adel (2006, p.

123), who asserted that metadiscourse should be taught as a standard course unit of writing instruction and not as an added topic. Besides this, contextualized practice is also the goal of this study. Teachers have to embed markers in real writing assignments like research papers or argumentative essays so that students' learning of markers is not mechanical memorization but rhetorical awareness construction. The assumption here is that real practice with explicit instruction would remedy the issue of surface cohesion and deep rhetorical coherence.

5.3 Unexpected Findings and Limitations

Besides the overall positive findings, the study also produced some surprising findings that emerged. One of these findings was that excessive usage of some markers among some students had resulted in redundancy and mechanical usage. For example, students would use transitional words such as firstly, secondly, finally repeatedly in almost every paragraph regardless of appropriacy. This would suggest that while instruction had made metadiscourse markers more salient, learners had used their application formulaically rather than contextually. These results confirm Mauranen's (1993, p. 182) conclusion that EFL learners use surface strategies on initial exposure to new features of discourse. The other shock was that although cohesion showed relatively high performance, macro-level coherence (especially in more advanced argument writing) remained patchy. While the students were getting better at keeping sentences and paragraphs in balance, on occasion they were unable to maintain an argument throughout the length of an entire essay. This is evidence for Hinkel's (2002, p. 98) argument that higher writing ability was associated with regular practice at the organisation of discourse beyond the paragraph and sentence levels. That relationship is, while local coherence may be taught explicitly, global coherence is always a green long-term pedagogic issue. Overall, the study is amenable to the open benefit of direct metadiscourse teaching but implies the need for successive pedagogical interventions. Repeated exposure, reiterated over time, and scaffolding feedback will likely be required if students are going to be able to successfully internalize such strategies and employ them flexibly across a variety of writing tasks.

6. Limitations Although there have been encouraging results in this latest research, a few of its limitations cannot be ignored. Firstly, the sample was small at just 30 Iraqi EFL learners. A larger sample would have provided more representative results and reduced the margin of error (Creswell & Creswell, 2018, p. 152). Secondly, the instruction duration was limited to short intervention of just six weeks. Because of the complexity of achieving the mastering of metadiscourse markers, a longer instructional period may have produced more significant improvement in learners' writing ability (Hyland, 2017, p. 43). Thirdly, the experiment was conducted in a given academic environment—a university in Iraq. For this reason, cultural, institutional, and linguistic settings may have influenced the learners' writing mode and their awareness to teaching metadiscourse (Al-Qadi, 2017, p. 96). A second limitation is the exclusive concern with writing only. Though the study demonstrated improvement in coherence and cohesion, it did not treat learners' speaking abilities or reading comprehension, in which metadiscourse markers would play an equally key role (Crismore et al., 1993, p. 49). Finally, the study relied heavily on researcher-designed writing tests, which do not necessarily reflect learners' real academic writing tasks. These limitations necessitate caution when interpreting the results.

7. Future Research On the basis of the latest research, future research would have to consider some directions. First, expanding the sample size and including learners from different regions or institutions would enhance generalizability of the results (Dörnyei, 2007, p. 114). Second, future research could compare the effectiveness of metadiscourse training between levels of proficiency, i.e., beginner, intermediate, and advanced learners, in order to investigate whether the effects of instruction vary along language development phases (Hyland, 2005, p. 176). Third, researchers must examine longitudinal studies with extended teaching periods to determine if the cohesion and coherence gains are sustained in the long term (Meyer, 1997, p. 234). Fourth, contrastive studies can examine the implementation of new pedagogic approaches such as task-based instruction or online learning environments for improving the use of metadiscourse markers (Godwin-Jones, 2018, p. 12). Finally, future research can broaden their focus with regard to studying multimodal texts and spoken discourse so that a broader view of metadiscourse can be observed in different language skills (Mauranen, 2010, p. 21).

8. Conclusion This study demonstrated that metadiscourse marker instruction was consistently successful in enhancing the Iraqi EFL students' writing cohesion and coherence. The findings indicated that not only did learners increase the frequency of their use, but they also used them more appropriately and deliberately, leading to improved organization and increased reader interest (Hyland, 2017, p. 54). These findings establish the pedagogical significance of teaching metadiscourse to enhance the academic writing ability of EFL students. Also, studies showed that students acquired heightened sensitivity to rhetorical organization, an important characteristic of effective academic writing (Hyland & Tse, 2004, p. 169). Though limitations such as small

sample size and short instruction time restrain applicability of findings, the research provides valuable insight on the role of metadiscourse in second language acquisition. In conclusion, metadiscourse instruction needs to be made explicit within EFL writing courses in order to equip the learners with the ability to produce coherent and cohesive text. Such inclusion can bridge the linguistic competence-communicative competence gap, resulting in academic success and improved writing confidence in English (Al-Qadi, 2017, p. 98).

References

- Abdaloussein, H. F. (2022). Iraqi EFL learners' use of formulaic language in writing proficiency exams. *Journal of Language and Linguistic Studies*, 18(1), 1079–1093.
- Abdollahzadeh, E. (2011). Poring over the findings: Interpersonal metadiscourse in applied linguistics articles in English and Persian. *Journal of Pragmatics*, 43(1), 288–297.
- Adel, A. (2006). *Metadiscourse in L1 and L2 English*. John Benjamins.
- Al Issa, A., Amirian, Z., & Ketabi, S. (2024). The effect of teaching discourse markers through flipped model on Iraqi EFL learners' writing performance. *Language Teaching Research Quarterly*, 45, 123–139.
- Al-Khazraji, A. (2019). Cohesive devices in the writings of Iraqi EFL university students. *Journal of Language Teaching and Research*, 10(1), 12–21.
- Al-Qadi, N. S. (2017). The use of discourse markers in the writing of Jordanian EFL learners. *Journal of Education and Practice*, 8(14), 95–105.
- Ädel, A. (2006). *Metadiscourse in L1 and L2 English*. John Benjamins.
- Brown, H. D. (2015). *Teaching by principles: An interactive approach to language pedagogy* (4th ed.). Pearson.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39–71.
- Diep, G. L., & Diep, L. T. N. D. (2024). An analysis of coherence and cohesion in English majors' academic essays. *International Journal of Language Instruction*, 3(3), 1–21.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Esfandiari, R., & Allaf-Akbary, F. (2024). Assessing interactional metadiscourse in EFL writing through data-driven learning: The case of intermediate EFL learners. *Language Testing in Asia*, 14(36), 1–22.
- Godwin-Jones, R. (2018). Emerging technologies: Using mobile devices in language learning and teaching. *Language Learning & Technology*, 22(3), 3–15.
- Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. Longman.
- Hinkel, E. (2002). *Second language writers' text: Linguistic and rhetorical features*. Lawrence Erlbaum.
- Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing*. Continuum.
- Hyland, K. (2007). Applying a metadiscourse model to teaching L2 writing. *ELT Journal*, 61(3), 164–173.
- Hyland, K. (2017). Metadiscourse: What is it and where is it going? *Journal of Pragmatics*, 113, 16–29.
- Hyland, K. (2017). *Teaching and researching writing* (3rd ed.). Routledge.
- Hyland, K. (2018). *Metadiscourse: Exploring interaction in writing* (2nd ed.). Bloomsbury.
- Hyland, K., & Jiang, F. K. (2018). "In this paper we suggest": Changing patterns of disciplinary metadiscourse. *English for Specific Purposes*, 51, 18–30.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156–177.
- Jalilifar, A. (2010). The status of metadiscourse in Iranian university students' EFL writing. *English Language Teaching*, 3(4), 29–39.
- Mauranen, A. (1993). *Cultural differences in academic rhetoric: A textlinguistic study*. Peter Lang.
- Mauranen, A. (2010). Features of spoken academic discourse. In M. Coulthard & M. Montgomery (Eds.), *The Routledge handbook of discourse analysis* (pp. 19–34). Routledge.
- Meyer, B. J. F. (1997). *Prose analysis: Purposes, procedures, and problems*. In T. van Dijk (Ed.), *Discourse as structure and process* (Vol. 1, pp. 233–258). Sage.

Appendix

Scoring Rubric for Coherence and Cohesion

Category 1: Coherence (Logical Organization and Flow of Ideas)

Excellent (4 points):

The essay possesses a clear thesis and well-ordered ideas. Each paragraph develops a single overarching idea and defends the overall argument. There is cohesive paragraph-to-paragraph transition to create a smooth and readable flow (Diep & Diep, 2024, pp. 2–3).

Good (3 points):

The essay possesses a broadly logical organization with minor flaws in ordering. Paragraphs tend to coincide with the thesis, yet sometimes the transitions sound awkward or insufficient (Hyland & Jiang, 2018, pp. 21–22).

Fair (2 points):

Organization is uneven. Paragraphs exhibit indeterminate focus, and ideas sometimes appear disjointed. General flow is occasionally disrupted, and reader effort is required in order to trace (Abdaloussein, 2022, pp. 1090–1092).

Poor (1 point):

The essay lacks logical organization. Ideas are disconnected, without progression. The thesis may be ambiguous, and paragraphs appear fragmented.

Category 2: Cohesion (Surface Connectivity and Use of Metadiscourse)

Excellent (4 points):

A set of metadiscourse markers (transitions, frame markers, evidentials, hedges, boosters, and attitude markers) is used appropriately and aptly. Connectors and references make connections between paragraphs and sentences smooth (Hyland, 2018, pp. 57–58; Esfandiari & Allaf-Akbary, 2024, pp. 11–13).

Good (3 points):

There is an appropriate range of metadiscourse markers, but some are perhaps repetitive or formulaic. Overall cohesive devices do help with understanding, but the odd lack or overuse of them spoils fluency (Al Issa et al., 2024, pp. 124–126).

Fair (2 points):

There is a limited range of cohesive devices used with frequent repetition of too few transitions (e.g., first, also, therefore). Misuse or absence of markers frequently hinders clarity (Abdaloussein, 2022, pp. 1091–1092).

Poor (1 point):

Minimal or no cohesive devices are used. There are disjointed-looking paragraphs and sentences with virtually no evidence of sensitivity to guiding readers.

Scoring and Interpretation

Total Possible Score: 8 points (4 for coherence + 4 for cohesion).

7–8 points: Highly effective coherence and cohesion.

5–6 points: Sufficiently effective but with flaws.

3–4 points: Poor effectiveness; reader effort required in writing.

1–2 points: Inadequate coherence and cohesion.