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Exploring Interactive and Interactional Metadiscourse in Expository Writings of ESL Hard Science and Soft Learners

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ABSTRACT

The coherence of an essay is maintained with interactive and interactional metadiscourse (MD). Writing involves one-way interaction between the writer and reader, making it difficult for Second Language (L2) learners to compose effectively and thoroughly. Furthermore, students have a limited understanding of MD markers and prefer to exclusively employ specific MD markers, such as transition markers and self-mentions, in their writing. The study aims to find out if learners in different course groups employ different MD types, different MD features, or the same amount of MD features across the two groups. This study evaluates interactive and interactional MD markers in 40 expository essays authored by ESL learners from hard and soft science courses using Hyland's MD table (2005). Data collected was charted and transferred into frequency and percentage. The two groups, hard science and soft science used different materials in varying amounts and varieties. Soft science learners generated more MD features for interactive and interactional MD. They were more interpretative, whereas hard science learners were assertive in their writing and produced fewer MD features for both MD types. The study provides insight into improving students' awareness and use of MD, thereby enhancing their writing performance.

INTRODUCTION

Metadiscourse (MD) is a linguistic aspect that helps writers maintain their writing consistent and reader-friendly. All authors write for their readers, and by honing their MD skills, they may

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successfully connect with them. Typically, writers employ two levels of writing. The first stage is the delivery of propositional content. In other words, it is a logical substance or assertion. The second level is metadiscoursal. This is where different sorts of writers differ from one another. The engaging part, in which writers try to connect their readers to the propositional information, is critical. Some writers are better than others at determining their audience's interest and attention span.

English as a Second Language (ESL) learners find it difficult to write effectively and coherently because essay writing entails only one-way communication between the author and the reader. MD is a fascinating area of study that is thought to be essential to the process of arranging and generating writing and speech (Mat Zali et al., 2022). MD is considered a social act because all participants engage in interaction. In writing and composition, for instance, there is a dialogue between the author and the reader. Typically, learners of English as a second language must contend with a high degree of difficulty. It is not just one-sided idealism. Hyland (2004) defines MD as "introspective verbal expressions of the developing text, the author, and the imagined readership of that text" (Hyland, 2004, p. 25). This problem is exacerbated for ESL pupils by linguistic limitations (Abdul Rahman et al., 2022; Dillah et al., 2019; Isa et al., 2021).

It is fascinating to examine and observe how ESL learners gained MD traits in their writing. Meta-discourse in writing and speaking assists readers and writers in recognising its significance and guarantees that both parties comprehend the topic. According to Hyland (2005), teaching learners MD markers provides three major advantages. First, learners can identify the mental demands that the scriptures place on them and how they can help them with the writing process. Second, teaching MDs provides them with the motivation to persevere with their views. Third, the writer can affirm the rest of the information to the reader. In conclusion, it greatly aids the learning process.

The researchers have noted that ESL learners are currently having difficulty employing MD markers in their learning settings. According to Asghar (2015), Mu et al. (2015), Lu (2011), Dafouz-Milne (2008), and Hyland (1999), learners have a limited understanding of MD markers and prefer to employ specific MD indicators, such as transition markers and self-mentions, exclusively in their writing (Zali et al., 2020; 2022). This research aimed to discover how ESL learners used MD markers for this aim. According to Kashiha (2018) and Alharbi (2021), to emphasise the importance of MD markers for second language writers, it is crucial to examine how they are utilised in other genres of writing that are significant to ESL learners, such as expository writing. Furthermore, employing a more extensive corpus focusing on Malaysia may yield results.

In light of this, this study was conducted to investigate the frequency of the use of MD traits in two different groups of ESL learners (using a table from Hyland, 2005). Current research on MD and writing focuses on teaching English writing to the English teaching community, particularly ESL writing. Mohamad Noor and Mohamed Alam (2017) focused on academic endeavours, while Aziz et al. (2016) examined gender identities in argumentative essays. Lo et al. (2014) and Tan and Eng (2014) identified the use of MD in persuasive writing, Aziz et al. (2016) studied gender identities in argumentative essays, and Mohamad Noor and Mohamed Alam (2017) concentrated on academic endeavours. Lo et al. (2020) and Lo et al. (2021) investigated booster patterns in doctoral research proposal draughts. Zali et al. (2020) and Zali et. al (2022) examined evaluative writing by comparing hard and social science courses. Rahmat et al. (2020) examined gender differences, whereas Mohamed et al. (2021) emphasised the importance of writing persuasive

essays. Considering the paucity of prior research in this field on academic writing, this study intends to investigate and analyse two different types of MD, namely interactive MD and interactional MD, in expository essays written by Malaysian ESL learners based on Interactional and Interactive Metadiscourse Model by Hyland (2005).

Research Objectives

The study was conducted to seek the answers for:

- i. The most frequent types of MD (interactive or interactional) produced by ESL learners from soft science and hard science courses in expository writings.
- ii. The differences in MD features produced by these two groups of learners.
- iii. The most prominent and the least MD features produced by ESL learners in expository writings.

LITERATURE REVIEW

Interactive and Interactional Metadiscourse

Hyland's (2005) interpersonal model is described as a "more theoretically robust and analytically reliable model of MD" (Hyland, 2005, p. 37). Researchers believe that this model shows clearer functions and categories of MD and can help researchers identify the MD features produced by ESL learners in their expository writings. So far, it has been widely adopted by numerous studies (Abdi, 2011; Heng & Tan, 2010; Mahmood et. al, 2011; Ariannejad et. al, 2019; Majdah Alkathlan, 2019; Lotfi et. al, 2019; Mat Zali et al, 2019; Zali et al, 2020; Shafqat et al, 2020; Rahmat et al, 2020; Zahro et al, 2021; Lo et al, 2021; Ekawati & Rosyiidah, 2022; Goltaji & Hooshmand, 2022; Mat Zali et al., 2022). Therefore, this model is suitable for the current study.

The model proposed by Hyland (2005) includes two types of MD: interactive and interactional measurements. The interactive MD assists the author in organising propositional content for clarity, as shown in Table 1. *Transition Markers, Frame Markers, Endophoric Markers, Code Glosses, and Evidential* are these highlights. Interactive MD refers to the author's consideration of the audience and how he conveys the audience's plausible information, interests, expository desires, and handling capacities. Its purpose is to diagram a book to address the reader's concerns and ensure that the author's intended understanding and goals are met. Thus, interactive MD directs the reader through the text. In this sense, it alludes to techniques for organising speech. *Endophoric Markers* allude to data in other parts of the content (for example, see fig. x), *Evidentials* allude to data from other writings (for example, as indicated by x, z states), *Frame Markers* allude to talk acts, successions, or stages (for example, at last, to conclude), and *Transition Markers* pass on the relations between sentences.

Table 1. Interactive Metadiscourse

| No | Interactive Metadiscourse | Examples |
|----|---|---|
| 1. | Code glosses- supply additional information by rephrasing, illustrating or explaining. | called, defined as, e.g., in other words, specifically |
| 2. | Endophoric markers- refer to other parts of the text in order to make additional information available, provide supporting arguments, and | (in) (this) Chapter; see Section X, Figure X, page X; as noted earlier |

| | thus steer the reader toward a preferred | | | |
|----|--|-------------------------------------|--|--|
| | interpretation. | | | |
| 3. | Evidentials are metalinguistic representations | (to) quote X, according to X | | |
| | of an idea from another source that helps to | | | |
| | establish authorial command of the subject. | | | |
| 4. | Transitions Markers- express semantic | In addition, but thus, and, because | | |
| | relation between main clauses | | | |
| 5. | Frame markers- to discourse acts, sequences | Finally, my purpose is/ to conclude | | |
| | or text stages | | | |
| | | | | |

Table 2. Interactional Metadiscourse

| No. | Interactional Metadiscourse | Examples |
|-----|--|---|
| 1. | Attitude Markers- indicate the writer's opinion or assessment of a proposition. | I agree,, I am amazed, appropriate, correctly, dramatic, hopefully, unfortunately. |
| 2. | Self-mention refers to the explicit authorial presence in the text and gives information about his/ her character and stance. | I, we, the author |
| 3. | Engagement markers- explicitly address readers to draw them into the discourse. | We, our (inclusive), imperative mood. |
| 4. | Hedges- indicate the writer's decision to recognise other voices, viewpoints or possibilities and be (ostensibly) open to negotiation with the reader, | Apparently, assume, doubt, estimate, from my perspective, in most cases, in my opinion, probably suggests |
| 5. | Boosters- allow the writer to anticipate and preclude alternative, conflicting arguments by expressing certainty instead of doubt. | Beyond doubt, clearly, definitely, we found, we proved, it is an established fact. |

As shown in Table 2, Interactional MD enables authors to provide commentary on their messages. Hyland refers to this current author's manner of a printed voice as Self-mentions, Hedges, Boosters, Attitude Markers, and Engagement Markers (Hyland, 2005), The interactional MD involves the reader in the argument and reveals the author's perspective on the propositional content (Hyland, 2004). Self-mentions indicate unambiguous creator proximity in the content' (Hyland, 2005). This is demonstrated using first-person pronouns and possessive descriptors such as I, me, my, our, mine, and us. The terms like the writer, the essayist, the writer's, and the writer's can also be used to highlight Self-Mentions. Hedges are utilised to express the author's choice to acknowledge alternative voices, perspectives, or opportunities and to be (supposedly) amenable to discussion with the reader (Hyland, 2005). Supports express the writer's information as a sentiment or a conceivable thought rather than a fact. For example, in my opinion, as I like to believe, likely and tend. Various elements constitute Boosters, Unlike Hedges, Boosters assist learners in communicating their ideas with confidence. The examples are, in actuality, unquestionably and disobediently. Engagement Markers are employed by authors to address and draw readers to the discussion directly. This should be achievable using inclusive we, our, and us, reader pronouns you and your, and the question mark. The most obvious sign of an essayist's dialogic awareness, according to Hyland (2005), is when the author alludes to readers by posing questions, making suggestions, and manner appropriately responding to them. Attitude Markers are the last interactional high points. They demonstrate the essayist's empathic, as opposed to epistemic, disposition towards suggestion. Examples include lamentably, strikingly, and fortunately. Jalilifar and Alipour (2007) demonstrate that strong essays contain more MD than weak ones. However, the use of interactional MD depends on the writer's writing ability, of which most writers are not completely proficient if their papers are compared to those of expert authors or native speakers (Mohamed & Ab Rashid, 2017).

Previous Studies

Writing is viewed as the most difficult skill for language learners to acquire despite its importance (Matmin et al., 2020). It requires the creative practice of reaching for one's thoughts and discovering them, as well as standard forms of grammar, syntax, and word choice.

Sorahi and Shabani (2016) investigated the use of MD in the introductions of Persian (20) and English (20) linguistics research articles. A comparison of MD types demonstrated that both Iranian and English RA introductions used interactive MD more frequently than interactional MD. Ramoroka (2016) examined the use of interactional MD highlights by Media Studies and Primary Education undergraduates at the University of Botswana in two college classes. The analysis of 40 articles and the examination of interactional MD markers in two corpora revealed the presence of interactional MD markers; however, there were variations in the undergraduates' use and dissemination of these markers.

According to Heng and Tan's (2010) study on L2 writers in their argumentative essays, Malaysian undergraduates produced more interactional MD markers than interactive MD markers in the Malaysian context. Intriguingly, Mahmood, Javaid, and Mahmood (2017) also discovered that Pakistani undergraduate learners were more likely to use interactional MD markers than interactive ones in their corpus of argumentative writings, like Heng and Tan's (2010) findings. *Transition Markers* were discovered to be the most utilised feature by L2 learners.

Ariannejad et. al (2019) explored and made some correlations between the utilisation of MD in English and Persian structural exploration articles. Like most scientists in this field, they likewise drew their examination based on Hyland's (2005) model of MD. Their examination explores the work of *Hedges, Boosters, and Attitude Markers* in a corpus made out of the post-technique areas of 100 exploration articles (50 English and 50 Persian) in the field of engineering. Overall, it was found that there are measurably noteworthy contrasts between the frequencies of *Hedges, Boosters, and Attitude Markers* utilised in the English and Persian sub-corpora. Ariannejad et al. (2019) expressed that their findings offer a thorough understanding of the rhetorical norms and conventions found in architectural articles as well as a more comprehensive view of the discursive patterns and persuasive techniques used by academic writers in this discipline, both in English and Iran.

Another fascinating study was conducted by Alkhathlan (2019), who explored Saudi EFL undergraduates' research articles and focused on the type and frequency of MD markers used. Hyland's (2005) model of MD was used to analyse the data. The findings indicated considerable contrasts in the occurrence of interactive and interactional MD. The learners utilised more interactive MD markers than interactional ones. The study further found that *Transition Markers* happened regularly in the research articles, followed by *Hedges*. The least utilised MD markers were *Endophoric Markers and Attitude Markers*.

Using Hyland's Interactional MD Table (2005), Mat Zali et al. (2019) analysed the corpus of 200 evaluation essays written by Malaysian ESL learners enrolled in hard and soft science courses. The purpose of the study was to determine if learners in both groups used the same

amount of meta-discourse if learners in distinct course groups chose MD differently, and if MD was utilised more or less in both courses. According to the analysis, learners in soft science subjects utilised more MD characteristics than learners from hard science courses. In addition, it was observed that learners frequently used *Self-mentions* and had few attribution indicators in their writing.

Zali et al. (2020) contrasted the usage of interactive and interactional MD research on how L2 learners constructed MD functions. Two hundred evaluative essays written by undergraduate computer science and business learners at UiTM were analysed based on Hyland's framework (2005). The objective is to determine how frequently and what types of metadiscourses are employed and whether learners in different course groups make decisions differently. In both courses, interactional metadiscourse was utilised more frequently than interactive MD. Self-references are the most prevalent trait, whereas attitude indicators are the least prevalent. Both courses' transition markers share the same distinguishing characteristic.

A corpus analysis of the MD markers employed in argumentative essays by Pakistani undergraduates was done by Shafqat et al. in 2020. The study aimed to determine the kinds of MD markers used in argumentative essays and their highest and lowest frequency. The results showed that interactive MD markers were used more frequently than interactional markers. *Transition Markers* are the MD elements most frequently utilised, while *Endophoric Markers* are the least frequently used. This study makes a case for the use of MD tools in the context of English Language Teaching (ELT), both for teaching and learning how to write well and for understanding discourse norms.

Mohamed et al. conducted an MD study in 2021 using 195 potent persuasive essays authored by Malaysian student authors. The study examined the frequency of MD markers used in both organisational and interpersonal discourse markers in the essays of good undergraduate writers, as well as how these MD markers are identified and classified into main categories and subcategories, according to Tan et al. (2012)'s simplified MD framework for ESL lay writers. According to the findings, college learners use more organisational discourse markers. Interpersonal discourse markers are less common in the corpus because the writer uses these norms to draw readers into the text's discussion. In this circumstance, these inexperienced college learners would use fewer hedges.

Akinseye (2023) explored the use of interactive MD as a discursive technique for improving academic writing skills among ESL undergraduates in Nigeria. A total of 100 expository writings were used. The study employs both qualitative and quantitative approaches. The qualitative component examines the types and applications of discursive techniques used in the selected expository writing, whilst the quantitative component focuses on the occurrence of these tactics. The findings show that *Transitional Markers, Frame Markers, and Code Glosses* were the most commonly utilised interactive markers in academic writing, while evidential and endophoric markers were employed less frequently. These findings highlighted the pedagogical importance of including interactive materials in teaching academic writing skills to ESL undergraduate learners.

Tahmasbi et al. (2024) currently conducted a study to investigate the effect of MD markers instruction on expository writing of 80 male and female EFL learners in a school setting, who were chosen through convenience sampling and interviewed with smaller participants. A statistical test of covariance revealed that MD marker instruction had a substantial effect on EFL learners'

expository writing. Another conclusion was that participants used interactional MD markers frequently.

For the research gap, it was found that not much research has been conducted in the Malaysian context involving Malaysian ESL learners. The writing genres studied are mostly persuasive, evaluative, and argumentative, and they are rarely found in expository writings. Furthermore, the current studies by Akinseye (2023) and Tahmasbi et al. (2024) used expository writings in their research to analyse the use of MD markers in their studies. There is also little attention to studying the different groups of students from hard and soft science courses, which may yield interesting results as conducted by Mat Zali et al. (2019) and Zali et al. (2020), which found that soft science students produced more MD markers in their writings as compared to hard science students.

RESEARCH DESIGN

Forty diploma learners from Universiti Teknologi MARA Cawangan Terengganu enrolled in the third semester of the ELC231 subject were selected for the investigation. Using the method of purposive sampling, 20 expository essays from Soft Science (Hotel Management) and Hard Science (Electrical Engineering) courses were selected for this quantitative study.

The corpus used in this study consists of forty expository essays with a total of twelve thousand words. These essays were written for one of the ongoing assessments for the Integrated Language Skills III (ELC231) subject, which accounts for 20% of the course grade. The learners were given 1 hour and 30 minutes to write a 250-300-word essay focusing on a single topic (Ways to Address Bullying Issues Among Teens) as part of an in-class assessment. This study aimed to identify and explain interactive and interactional MD markers used by male and female learners and their roles in the essays.

Data collected after manual analysis was charted and transferred into frequency and percentage. The search items were compiled using Hyland's (2005, pp. 218-224), which has two types: the interactional MD, which are Attitude Markers, Self-mentions, Engagement Markers, Hedges and Boosters; and Interactive MD, which are *Transition Markers, Frame Markers, Endophoric Markers, Code Glosses, and Evidentials*. The list of MD items is shown in Tables 1 and 2 before.

The study was designed to (a) identify the frequent types of metadiscourse produced by business administration and computer science learners in their writing, (b) distinguish the differences of metadiscourse features produced by these learners, and (c) determine the most prominent and least metadiscourse features produced by them. The results and discussion of the study are explained in line with the study objectives.

RESULT AND DISCUSSION

Research Objective 1: The frequent types of MD produced.

The two tables below indicate the MD features (interactive and interactional) produced by learners from hotel management (HM) and electrical engineering (EE) courses in their writing.

Table 3. The frequency and percentage of metadiscourse features produced by the HM course

| HM | Frequency | % |
|-----------------------------|-----------|-------|
| INTERACTIVE METADISCOURSE | | |
| Code glosses | 16 | 2.75 |
| Endophoric markers | 151 | 26 |
| Evidentials | 0 | 0.00 |
| Transition markers | 361 | 62.13 |
| Frame markers | 53 | 9.12 |
| Total | 581 | 100.0 |
| INTERACTIONAL METADISCOURSE | | |
| Hedges | 139 | 53.05 |
| Boosters | 1 | 0.38 |
| Attitude markers | 3 | 1.15 |
| Engagement markers | 3 | 1.15 |
| Self-mention | 116 | 44.27 |
| Total | 262 | 100.0 |

Table 3 demonstrates that HM learners produced significantly more interactive MD (581) than interactional MD (262), indicating a significant difference between the two categories. The table indicates that the HM course utilised 2.75 per cent Code glosses, 26 per cent *Endophoric markers*, 62.13 per cent *Transition markers*, 9.12 per cent *Frame markers*, and no *Evidentials* related to interactive MD. This course demonstrates 53.05% *Hedges*, 0.38 % *Boosters*, 1.15 % *Attitude markers* and *Engagement markers*, and 44.27% *Self-mention* within the interactional MD.

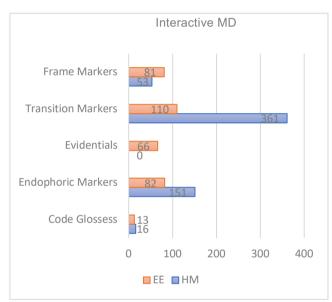
Table 4. The frequency and percentage of metadiscourse features produced by EE course

| EE | Frequency | % |
|-----------------------------|-----------|-------|
| INTERACTIVE METADISCOURSE | • | |
| Code glosses | 13 | 3.69 |
| Endophoric markers | 82 | 23.30 |
| Evidentials | 66 | 18.75 |
| Transition markers | 110 | 31.25 |
| Frame markers | 81 | 23.01 |
| Total | 352 | 100.0 |
| INTERACTIONAL METADISCOURSE | | |
| Hedges | 104 | 40.63 |
| Boosters | 0 | 0.00 |
| Attitude markers | 4 | 1.56 |
| Engagement markers | 0 | 0.00 |
| Self-mention | 148 | 57.81 |
| Total | 256 | 100.0 |

In their writings, EE learners utilised more interactive MD than interactional MD, as shown in Table 4. Through the interactive MD, the EE course highlights 3.69 per cent of code glosses, 23.30 per cent of *Endophoric markers*, 18.75 per cent of *Evidentials*, 31.25 per cent of Transition markers, and 23.01 per cent of *Frame markers*. This course's interactional MD contains 40.63 per cent *Hedges*, 1.56 per cent Attitude markers, and 70.14 per cent *Self-mention* but no *Boosters* or *Engagement markers*. In their writings, learners from both courses used more interactive MD features (933) than interactional MD features (518). In general, both courses employed more interactive MD features than interactional in their writings, EE learners utilised more interactive MD than interactional MD, as shown in Table 4. Through the interactive MD, the EE course highlights 3.69 per cent of code annotations, 23.30 per cent of *Endophoric markers*, 18.75 per cent of *Evidentials*, 31.25 per cent of *Transition markers*, and 23.01 per cent of *Frame markers*. This course's interactional MD contains 40.63 per cent *Hedges*, 1.56 per cent Attitude markers,

and 70.14 per cent *Self-mention* but no *Boosters* or *Engagement markers*. In their writings, learners from both courses used more interactive MD features (933) than interactional MD features (518). In general, both courses employed more interactive MD features than interactional MD features in their writings. This result is comparable to that of Alkhathlan (2019), Shafqat et al. (2020) and Akinseye (2023) but differs from those of Heng and Tan (2010), Mahmood et al. (2017) and Tahmasbi et al. (2024), who found that undergraduate learners' L2 corpus exhibited more interactional MD features than interactive ones. This might be because only skilled writers can produce interactional MD, which significantly challenges their writing abilities (Amaal & Radzuwan, 2017). This is because the learners usually used MD to connect the ideas in the sentences of their essays rather than voice out their opinions about the issues discussed in the essay. Furthermore, the use of interactional MD, like Self-mentions, Hedges, Boosters, Attitude Markers, and Engagement Markers, helps the authors to voice out their opinions in writing, which is referred to by Hyland (2005) as the author's manner of expressing his or her voice.

Research Objective 2: The differences in MD features produced.



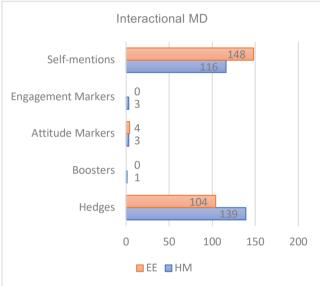


Figure 1. The metadiscourse features produced by HM and EE courses

The above charts demonstrate the differences in MD features produced by hotel management and electrical engineering courses in the interactive and interactional MD. If we compared these two, HM learners preferred to use the elements of interactive MD, such as *Transition markers* and *Endophoric markers*, to interactional MD. However, EE learners preferred to use the components of interactional MD, such as *Self-mention* and *Hedges*, which agreed with studies by Abdi (2002) that the choice of interactional MD was discipline-related. Meanwhile, business administration learners (who belong to social and humanities fields) tended to intervene a lot (through the use of interactional MD features) and were subjective in their writings. Hyland (2005) also found a similar result: the writers exhibited more interactive MD features than interactional MD features. The outcomes likewise demonstrated a huge distinction in the utilisation of MD on highlights, with the humanities and social sciences using more MD and over 60% of the interactional features.

Hard science course (EE) Interactive metadiscourse Interactional metadiscourse The most transition markers prominent self-mention endophoric markers hedges frame markers attitude markers engagement evidentials markers The least code boosters glosses

Research Objective 3: The most prominent and the least metadiscourse features

Figure 2. The most prominent and the least metadiscourse features produced by hard science courses (EE)

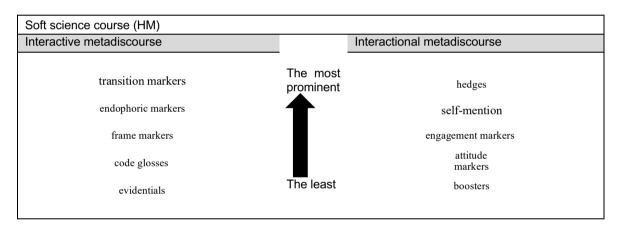


Figure 3. The most prominent and the least metadiscourse features produced by soft science course (HM)

The two figures above show the MD features produced by hard (EE) and soft science (HM) courses. Based on the interactive MD graph, *Transition markers* were the highest feature used by soft science learners (HM), with 361, which contradicted the result by Majdah Alkhathlan (2019) and Zali et al. (2020, 2022). Transition markers link the relations between main clauses, such as in addition, but, thus, and, first, next, etc. However, based on the interactional MD graph, self-mentions were the most used feature by hard science (EE) learners, with 148. Hence, we can conclude that hard science (EE) learners preferred to use the features in interactional MD compared to interactive MD and the soft science (HM) group. Apart from that, according to the interactive MD graph, the least MD feature was Evidential which was not used by soft science (HM) and also hard science (EE) learners. Evidentials are used as reference information found in other texts (e.g., x, z states) which is not widely used by the writers in expository writings. Meanwhile, in the interactional MD graph, the least MD feature was Engagement markers and Boosters with zero by hard science (EE) learners, which disagreed with the result of the study by

Majdah Alkhathlan (2019) and Zali et al. (2020). The absence of *Engagement markers, Boosters* and *Evidentials* might be because of the nature of expository essays, which rely on different structures to communicate their positions, like compare and contrast, process essays, and analysing cause and effect.

CONCLUSION

The use of effective MD is crucial for writing success. The authors' texts would benefit greatly from education in MD's features. The study found that learners in both courses used more interactive MD features than interactional MD features in their writing. This might be because skilled writers typically produce interactional MD, which significantly challenges their writing abilities. Next, learners in the soft science courses favoured interactional MD features such as Self-mention, Engagement markers, Attitude markers, Boosters, and Hedges. Finally, Transition markers were discovered as the most salient MD feature; meanwhile, the least were Evidentials, Boosters, and Engagement markers.

Limitations of Study

This study has several limitations that could be addressed in future research. First, the study's corpus material was limited. A larger sample size would increase the precision of the validity of these findings. Second, there was insufficient information about the authors or participants. Gaining access to pertinent participant information can facilitate a comprehensive analysis of the results.

Pedagogical Implications

For the study's pedagogical implication, MD is currently not widely exposed to ESL learners. So, it is proposed that the concepts of MD be imparted to the learners, who will be introduced to the MD features and use them in their writings. This would be an effective strategy for university-level learners, as many novice writers focus too much on the product, the written text and not enough on the primary purpose of writing, which is to communicate with the readers. By exploring MD, students would become more aware of their readers' demands and be better equipped to address them, transforming writer-based prose into reader-based prose. Additionally, by comprehending MD, writers would become more conscious of the propositional content's truth value and develop into moral writers who focus more on expressing any scepticism they may have than merely stating that their claims are accurate. The appropriate use of MD plays an important part in a successful text. When student writers lack an overall knowledge of rhetorical conventions, they do not know how to make good use of these interpersonal and textual functions of language. This often leads them to produce writer-based prose in which the propositional content is not effectively conveyed, thus lowering the overall quality of their texts.

Future Research

For future research, it is suggested that secondary institutions and universities conduct a comparative study on MD writing. Therefore, we can compare the levels of learners and their utilisation of MD features, whether they are using interactive or interactional MD. The purpose is to determine whether learners have been exposed to the use of MD at the secondary level and to examine the implementation of MD at the university level. Investigating various types of writing,

such as evaluative writings, article reviews, etc., could be interesting if it reveals a greater prevalence of MD features among L2 writers.

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CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits or commercial or financial conflicts and declare the absence of conflicting interests with the funders.

AUTHORS' CONTRIBUTIONS

Masliza Mat Zali carried out the research and wrote and revised the article. Nurul Ajleaa Abdul Rahman and Roszainora Setia conceptualised the central research idea and provided the theoretical framework. Ana designed the research and supervised the research progress; Masliza Mat Zali anchored the review and revisions and approved the article submission.

REFERENCES

- Abdi, R., (2002). Interpersonal metadiscourse: An indicator of interaction and identity. *Discourse Studies* 4(2), 139–145. https://doi.org/10.1177/14614456020040020101
- Abdul Rahman, N. A.., Zulkornain, L. H., & Hamzah, N. H. (2022). Exploring Artificial Intelligence using Automated Writing Evaluation for Writing Skills. *Environment-Behaviour Proceedings Journal*, 7(SI9), 547-553. https://doi.org/10.21834/ebpj.v7iSI9.4304
- Akinseye, T. (2023). Exploring interactive metadiscourse as a practical approach to enhancing academic writing skills of newly admitted undergraduate students in Nigeria. EuroAmerican Journal of Applied Linguistics and Languages, 10(2), 44–61. http://doi.org/10.21283/2376905X.1.10.2.2756
- Alharbi, S. H. (2021). A comparative genre-based analysis of the move-step structure of rais in two different publication contexts. *English Language Teaching*, *14*(3), 12-24. https://doi.org/10.5539/elt.v14n3p12
- Alkhathlan, M. (2019). Metadiscourse in Academic Writing: An Investigation of Saudi EFL Students' Research Articles. *Linguistics and Literature Studies* 7(5): 220–225. DOI: 10.13189/lls.2019.070505
- Ariannejad, Aida & Osam, Ulker & Yigitoglu, Nur. (2019). A comparative investigation of metadiscourse in English and Persian architectural research articles. *Poznan Studies in Contemporary Linguistics*. DOI:55. 01-25. 10.1515/psicl-2019-001
- Asghar, J. (2015). Metadiscourse and Contrastive Rhetoric in Academic Writing: Evaluation of a small academic corpus. *Journal of Language Teaching and Research*, 6(2), 317–326. http://dx.doi.org/10.17507/jltr.0602.11
- Dafouz-Milne, E. (2008). The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A crosslinguistic study of newspaper

- discourse. *Journal of pragmatics, 40(1),* 95-113. https://doi.org/10.1016/j.pragma.2007.10.003.
- Dillah, D., Manokaran, J. ., Mohd Ris, E. Z. ., & Jamian, L. S. . (2021). What Do ESL Learners Perceive as Effective 21st Century L2 Pedagogies? *Environment-Behaviour Proceedings Journal*, *6*(SI4), 109-116. https://doi.org/10.21834/ebpj.v6iSI4.2909
- Ekawati, R & Rosyiidah, AA. (2022). Metadiscourse Markers in English Essays Written by Indonesian Students in EFL Setting. *Journal of English Language Teaching in Indonesia*. 10(2) DOI: 10.22460/eltin.v10i2.p%p
- Goltaji, F and Hooshmand, M. (2022). The Study of Interactive Metadiscourse Markers in TEFL Textbooks Written by Native vs. Non-Native Authors. *Journal of English Language Research*. Volume 3, Number 1, July 2022, (pp. 27-38).
- Heng, C., & Tan, H. (2010). Extracting and comparing the intricacies of metadiscourse of two written persuasive corpora. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 6(3), 124-146.
- Hyland, K. (1999). Talking to students: Metadiscourse in introductory coursebooks. *English for specific purposes*, 18(1), 3-26. https://doi.org/10.1016/S0889-4906(97)00025-2
- Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing, Vol 13*, Issue 2, 133-151. https://doi.org/10.1016/j.jslw.2004.02.001
- Hyland, K. (2005). Metadiscourse: Exploring interaction in writing. London: Continuum.
- Isa, S. S. ., Jamaludin, N. L. ., Ali, A. ., & Said, S. N. . (2021). The usage of Games-Based Intervention in Improving the English Language Proficiency of High School B40 Students. *Environment-Behaviour Proceedings Journal*, 6(SI6), 11-15. https://doi.org/10.21834/ebpj.v6iSI6.3036
- Jalilifar, A &, Alipour, M. Reading. (2007). How Explicit Instruction Marks a Difference: Metadiscourse Markers and EFL Learner's Reading Comprehension Skills. *Journal of College Reading and Learning.* 38 (1), 35-52. https://doi.org/10.1080/10790195.2007.10850203
- Kashiha, H. (2018) 'Malaysian ESL students' perception of metadiscourse in essay writing.' Online Journal of Communication and Media Technologies 8(3), 193-201. https://doi.org/10.12973/ojcmt/2650
- Lu, L. (2011). Metadiscourse and genre learning: English argumentative writing by Chinese undergraduates (Unpublished Thesis). University of Hong Kong, Pokfulam, Hong Kong SAR. http://dx.doi.org/10.5353/th_b4599670
- Lo, Y. Y., Othman, J., & Lim, J. W. (2021). Mapping the Use of Boosters in Academic Writing by Malaysian First-Year Doctoral Students. *Pertanika Journal of Social Sciences & Humanities*, 29(3). https://doi.org/10.47836/pjssh.29.3.23
- Matmin,J., Md Naim.I., & Nik Luqman, N.(2020). Enhancing students' writing performance in higher learning through think-write-pair-share: An experimental study. *Asian Journal of University Education*, 16 (3), 255-264. http://doi.org/10.24191/ajue.v16i3.8396
- Mat Zali, M., Mohamad, R., Setia, R., Raja Baniamin, R. M., & Mohd Razlan, R. (2019). Interactional metadiscourse analysis of evaluative essays. *ESTEEM Journal of Social Sciences and Humanities Vol.* 5, 120-129. https://doi.org/10.21834/ebpj.v7iSI9.4248
- Mat Zali, M., Mohd Razlan, R., Raja Baniamin, R. M., & Setia, R. (2022). Interactional Metadiscourse Analysis of ESL Learners' Essays. *Environment-Behaviour Proceedings Journal*, 7(Sl9), 55-60. https://doi.org/10.21834/ebpj.v7iSl9.4248
- Mohamed, A. F., Ab Rashid, R.Lateh, N. H. M. & Kurniawan, Y. (2021). The use of metadiscourse in good malaysian undergraduate persuasive essays. *Online Journal of Language, Communication, and Humanities*, 1(1), 1-12. http://dx.doi.org/10.30874/ksshr.38

- Mohamed, A. F. M., & Ab Rashid,R., (2017). The metadiscourse markers in good undergraduate writers' essayscorpus. *International Journal of English Linguistics* 7(6), 213-220. **DOI:**10.5539/ijel.v7n6p213
- Mohamed, A. F., & Mohd Noor, N. (2017). Corpus analysis of metadiscourse in undergraduate academic projects. *International Journal of Modern Languages and Applied Linguistics* (*IJMAL*), 1(1). https://doi.org/10.24191/ijmal.v1i1.7618 1-4.
- Mu, C., Zhang, L. J., Ehrich, J., & Hong, H. (2015). The use of metadiscourse for knowledge construction in Chinese and English research articles. *Journal of English for Academic Purposes*, *20*, 135-148. https://doi.org/10.1016/j.jeap.2015.09.003.
- Rahmat, N. H., Abdullah, N. A. T., Yahaya, M. H., Yean, C. P., & Whanchit, W. (2020). Gender Differences on the Use of Metadiscourse on Reflective Essays: A Case Study of Inbound Students. *International Journal of Asian Social Science*, *10*(5), 248–261. https://doi.org/10.18488/journal.1.2020.105.248.261
- Ramoroka, B. (2016) A study of Interactional Metadiscourse Features in Texts Written by Undergraduate students at the University of Botswana. https://doi.org/10.4102/rw.v8i1.128
- Shafqat, A., Arain, F., & Dahraj, M. T. (2020). A corpus analysis of metadiscourse markers used in argumentative essays by Pakistani undergraduate students. *International Journal of Psychosocial Rehabilitation*, 24(4). https://doi.org/10.37200/V24I4/11466
- Sorahi, M. & Shabani, M. (2016). Metadiscourse in Persian and English Research Article Introductions. *Theory and Practice in Language Studies*, Vol. 6, No. 6, pp. 1175-1182
- Tahmasbi, M., Fatahipour, M., & Gharagozloo, N. (2024). The Impact of Online Instruction of Metadiscourse Markers on Iranian EFL Learners' Expository Writing. *Research in English Language Pedagogy*, *12*(1), 140-172. DOI: 10.30486/RELP.2023.1979996.1443
- Tan, H., Chan, S. H. & Abdullah, A. N. (2012). A proposed metadiscourse framework for lay ESL writers. *World Applied Sciences Journal*. 20(1), 1-6. DOI: 10.5829/idosi.wasj.2012.20.01.1530
- Zahro, F., Irham, I., & Degaf, A. (2021). Scrutinizing metadiscourse functions in Indonesian EFL students: a case study on the classroom written and spoken discourses. *MEXTESOL*, *45*(2), 1-14
- Zali, M. M., Mohamad, R., Setia, R., Baniamin, R. M. R., & Razlan, R. M. (2020). Comparisons of Interactive and Interactional Metadiscourse among Undergraduates. *Asian Journal of University Education*, 16(4), 21-30. https://doi.org/10.24191/ajue.v16i4.11946



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