

Interactional Metadiscourse Markers in Political Science Journal Articles

Noor Afifah NAWAWI*, Su-Hie TING

Faculty of Language and Communication, University Malaysia Sarawak, Kota Samarahan

Author's email: 19020153@siswa.unimas.my

*Corresponding author: 19020153@siswa.unimas.my

Abstract. *Interactional metadiscourse markers allow writers to regulate their presence in their writings and engage with their readers. The study examined the use of interactional metadiscourse markers in political science journal articles. The specific objectives of the study were to: (1) identify the most frequently used category of interactional metadiscourse markers; (2) illustrate the functions of interactional metadiscourse markers; and (3) determine if there are significant differences in categories of interactional metadiscourse markers used across journals. Hyland's (2005) interpersonal metadiscourse model was adapted to analyse 12 political science articles from three refereed journals. The analysis indicates the writers' common tendencies to feature boosters and hedges as their top two functional categories. The boosters commonly used to emphasise the writers' claims are "only", "will", "even" and "significant". The hedges commonly used to withhold the writers' commitment are "would", "could", "may" and "likely". Attitude markers, engagement markers and self-mentions were present in the corpus as well with varying level of distribution. The high-frequency attitude markers are "important", "simply", "unfortunately" and "difficult" whereas the high-frequency engagement markers are in the form of questions, "we", "should" and "see". In contrast, self-mentions are infrequent in some of the political science journal articles where authorial presence was low. However, the researcher identity was more visible in the other half of the articles with first person pronouns. The findings suggest that while the writers viewed hedges and boosters as equally important for their proposition, but not all of them are comfortable with highlighting their presence.*

Keywords: *Interactional, metadiscourse, political science, low impact, journal articles*

1. INTRODUCTION

Fundamentally, metadiscourse represents the functions that language has that allow writers to interact with their readers (Hyland, 2017). Studies on metadiscourse focus on how writers use linguistic items as functional resources to organise their texts, engage with the readers and project their attitude towards their content and the readers (Hyland & Tse, 2004). It is an integral part to any writing and the absence of metadiscourse markers would make it dull and disrupt the flow of information (Hyland, 2005). Academic writers incorporate linguistic items that are relevant and representative of their respective disciplines. In order to attract their audience's attention and influence their perspective, the writers utilise items that are genre-specific as well as those that align with the discipline convention (Hyland, 2005).

Research has shown disciplinary conventions in writings from undergraduates (Ho & Li, 2018; Li & Wharton, 2012), postgraduates (Afshar & Bagherieh, 2014; Akbas, 2012; Lee & Casal, 2014) as well as journal articles (Hu & Cao, 2015; Khedri & Kritsis, 2018). For instance, Khedri and Kritsis (2018) found that chemistry writers use hedges to make general assumptions while applied linguistic writers use them to

present past findings. In another study, Hu and Cao (2015) compared the use of interactional metadiscourse markers in articles from applied linguistics, education as well as psychology. Hu and Cao (2015) found frequent usage of self-mentions in the psychology research articles where as applied linguistics and education articles had a larger number of boosters. These findings indicate that there are possibly disciplinary conventions with respect to the use of interactional metadiscourse markers, and it is better for studies to focus on research articles from particular disciplines.

Other reasons have been posited to explain variations in the use of interactional metadiscourse markers. Some researchers have focused on interactional metadiscourse markers in specific rhetorical sections in the research articles (Khedri, Ebrahimi & Heng, 2013; Kawase, 2015; Liu & Huang, 2017). For example, Khedri et al.'s (2013) analysis focused on the result and discussion section and found boosters to appear much more in the soft sciences disciplines compared to the hard sciences. Other researchers have shown that novice researchers are less adept at using certain metadiscourse markers. For instance, Bax, Nakatsuhara, and Waller (2019) who investigated metadiscourse features used by intermediate and advanced English as a Second Language students found that as the levels go up, the usage of endophorics and evidentials increased while emphatics, hedges, label stages, person markers, relational markers, topic shifts decreased. Further support on the sparing use of endophoric markers and evidentials by undergraduates who were learning English as a foreign language was obtained by Gholami, Nejad, and Pour (2014) in Iran. Gholami et al. (2014) also found low usage of code glosses in the writings of low proficiency students, suggesting that beginner writers assume their readers would have the background knowledge to comprehend their content. Asghar (2015) found that hedges accounted for only 4% of the metadiscourse features used by Pakistani undergraduates. These findings on the infrequent use of endophorics, evidentials, code glosses and hedges by less proficient students and novice researchers clearly show their unfamiliarity with referencing previous research and research writing conventions. There remains much to be understood about how novice and experienced researchers in various disciplines use interactional metadiscourse resources to organise their texts, engage with the readers and project their attitude towards their content and the readers.

The study examined the use of interactional metadiscourse markers in political science journal articles. The specific objectives of the study were to: (1) identify the most frequently used category of interactional metadiscourse markers; (2) illustrate the functions of interactional metadiscourse markers; and (3) determine if there are significant differences in categories of interactional metadiscourse markers used across journals.

2. LITERATURE REVIEW

The theoretical framework for this study was taken from Hyland's (2005) framework on metadiscourse resources, which he categorised into two dimensions: interactive and interactional. Interactive resources allow writers to guide their readers through the text while interactional resources involve the readers in the text development. The interactive dimension involves the sub-categories of transitions, frame markers, endophoric markers (e.g., "See Figure 1", "as noted above"), evidential ("according to X", "Y states that") and code glosses (e.g., "This is called", "in other words", "that is"). Meanwhile, the interactional dimension involves the sub-categories of hedges, boosters, attitude markers, engagement markers and self-mentions. Table 1 shows the functions and examples of interactional metadiscourse markers.

Table 1. Analysis framework for interactional metadiscourse markers

Category	Functions	Examples
Boosters	Emphasise certainty or close dialogue	in fact, definitely, only, even, significant, most, it is clear that, highly
Hedges	Withhold commitment and open dialogue	May, might, would, could, perhaps, about, suggest, tend to, likely, possible, to the best of our knowledge
Self-mentions	Explicit reference to writer(s)	first person pronouns (I, my, me, myself, we, our), the authors
Attitude Markers	Express writer's attitude to proposition	important, simply, unfortunately, difficult, appalling, we expect, I agree, surprisingly
Engagement Markers	Explicitly build a relationship with reader	First person pronouns, questions, personal asides, allusion to shared knowledge (you can see that, it has been accepted), directives (e.g., see, consider, note, imagine)

Hyland's (2005) framework has been extensively used in other studies till today (e.g., Hu & Cao, 2015; Khedri et al., 2013; Li & Wharton, 2012).

3. RESEARCH METHODOLOGY

A descriptive study was conducted to examine the use of interactional metadiscourse markers in 12 political science journal articles in the public policy discipline. The selection criteria for the articles included articles written in English and published between 2014 and 2020 on political science. Articles on general topics in public policy were chosen rather than those on abstract subject matter, which required specialised knowledge in the field to understand. Four articles each were taken from three refereed journals, namely, *International Journal: Canada's Journal of Global Policy Analysis*, *International Journal of Public Policy*, and *Journal of Public and International Affairs*. SAGE publishes the *International Journal: Canada's Journal of Global Policy Analysis*, which is included in Thomson Reuters Social Science Citation Index with an impact factor journal of 0.462. Next, the *International Journal of Public Policy*, a SCOPUS-indexed journal, is published by Inderscience six times a year. Finally, the *Journal of Public and International Affairs* is a refereed journal run by students in Princeton University and publishes research on foreign and domestic policy studies submitted by graduate students. These journals were rated as Q3-Q4 on by SCImago (scimagojr.com)

The interactional metadiscourse markers in the political science journal articles were analysed using an analysis framework based on Hyland's (2005) interpersonal model of metadiscourse to find out the markers used by writers to make reference to the text, themselves and the readers (see Table 1).

After the articles were retrieved from the journals' online homepage, they were printed. The data analysis procedures involved reading the article and conducting a manual search for interactional metadiscourse markers. With reference to the analysis framework (Table 1), potential interactional metadiscourse markers were highlighted and labeled in accordance to the interactional function that they fulfill. To ensure replicability in the coding of interactional markers using the analysis framework, both researchers coded three pilot test articles and discussed to resolve discrepancies in the coding by referring to the analysis framework, and improving the definition of the functions to ensure shared understanding of the functions. To reduce oversight error in finding interactional metadiscourse markers in the articles, the article was read at least three times to ensure that no interactional metadiscourse marker was missed in the coding. After the coding of interactional metadiscourse markers was completed, a frequency count was carried out to tabulate the distribution

of interactional categories. Finally Chi-square tests of independence were performed to determine whether there were significant differences between the three journals in the use of interactional metadiscourse categories in their political science articles.

4. RESULTS AND DISCUSSION

4.1 *Frequently used category of interactional metadiscourse markers*

The analysis showed that 2,354 interactional metadiscourse markers were used in the 12 political science journal articles analysed (Table 2). Out of the five interactional categories, boosters and hedges were the most frequently used (34.45% and 33.73% respectively). Boosters emphasise certainty or close the dialogue on a particular proposition while hedges withhold commitment or opens the dialogue on the proposition. As emphasised by Hyland (2005), while there is no definite designation on what is considered as “proposition”, in the context of metadiscourse, proposition insinuate any information or details that is independent of the textual information itself. Writers also hedge to avoid making generalisations. Self-mentions were the third frequently used interactional category (13.08%), followed by attitude markers (11.26%) where the writers express their attitude to a proposition. Engagement markers were the least used interactional marker category (7.48%), showing low emphasis on explicitly building a relationship with potential readers. All five categories of interactional markers were present in every article analysed, showing the importance of using different strategies to involve readers in the text development.

Table 2. Frequency of interactional metadiscourse markers in articles from three political science journals

	International Journal: Canada's Journal of Global Policy Analysis	International Journal of Public Policy	Journal of Public and International Affairs	Total	Percentage
Boosters	262	285	264	811	34.45
Hedges	270	255	269	794	33.73
Self- mentions	180	22	106	308	13.08
Attitude markers	72	89	104	265	11.26
Engagement markers	55	39	82	176	7.48
Total	839	690	825	2,354	
Percentage	35.64	29.31	35.05		

The political science researchers were more focused on propositional content, as shown by the frequent use of boosters and hedges compared to self-mentions, attitude markers and engagement markers. The combined results for boosters and hedges of 68.18% concur with Hyland's (2005) assertion that these two interactional metadiscourse markers are a common occurrence in humanities and social sciences articles. The political science articles were low on authorial presence, as shown by the relatively low combined frequency of less than 31.72% for self-mentions, attitude markers and engagement markers.

There seems to be some relationships in the usage of the categories of interactional metadiscourse markers. The number of hedges and boosters appear to be in an inverse relationship because the International Journal of Public Policy had the highest number of boosters but the lowest number of hedges. The pattern was the reverse for the other two journals. In addition, self-mentions appeared to be related to engagement markers because the frequencies of these two markers were

both low in a particular journal (International Journal of Public Policy), and concomitantly high in the other two journals. What these results suggest is that political science researchers who did not project themselves in their articles also were less likely to engage their readers explicitly as they may be more focused on the subject matter. However, these relationships between the interactional metadiscourse categories need to be verified using a larger dataset of articles.

4.2 *Functions of interactional metadiscourse markers*

This section illustrates the functions of interactional metadiscourse markers as used in different parts of a sentence.

Boosters made a strong presence in the articles, suggesting the writers' effort in expressing certainty and eliminating opposing views. Boosters were utilised to describe past findings, emphasise the intensity of a situation and emphasise the relevancy of their studies and their contributions. The largest number of boosters was found in the International Journal of Public Policy (n=285), and the other two journals were similar (International Journal: Canada's Journal of Global Policy Analysis, 262; Journal of Public and International Affairs, 264).

Within the articles, boosters were manifested through a selection of modal verbs, adjectives, adverbs and phrases. Booster items such as "only", "even", "significant" and "most" were more frequently used in the political science articles, compared to other expressions (e.g., "it is clear that"). Excerpts (1)-(4) show the use of boosters in the political science articles:

- (1) Modal Verb - "Given the development of coal-fired power plants, retailing electricity prices will drop and thus put residential solar PV projects at risk." (PS7)

The modal verb emphasises the writer's argument on how the prices are going to drop.

- (2) Adjective - "... there was a significant drop in hydropower generation..." (PS7)
The adjective "significant" illustrates the intensity of the drop.

- (3) Adverb - "Drugs and HIV/AIDS are highly linked with the female section of the Mauritian population..." (PS8)

The adverb "highly" amplifies the strength of the argument.

- (4) Phrases - "I believe my results add evidence that favors resolving ..." (PS11)

Here the writers accentuate their commitment towards their proposition by asserting their trust in their results.

It is not surprising to find boosters accounting for 34.45% of the interactional metadiscourse markers identified in the political science articles because other studies (e.g., Hu & Cao, 2015) have also found frequent use of boosters in applied linguistics and education articles. It can be surmised that in research writing, researchers need to promote the originality of their research and the significance of their findings, and boosters are useful to acknowledge the existence of various perspectives to an issue while promoting a specific angle at the same time. By using boosters, researchers influence their readers to share their argument.

Like boosters, hedges were a common occurrence in the political science articles, indicating the writers' constant need to withhold their commitment to a propositional content and to open a dialogue on it. Within the articles, hedges were commonly used to present and describe past findings as well as to describe the outcome of the research. Examples of hedges identified in the analysis were modal verbs ("may", "might", "would", "could") and tentative words ("perhaps", "about", "suggest"). Table 2 shows that altogether 794 hedges were identified. Two of the journals had similar numbers (International Journal: Canada's Journal of Global Policy Analysis, 270; Journal of Public and International Affairs, 269) but International Journal of Public Policy had fewer hedges (n=255). Excerpts (5)-(9) show the use of hedges by the writers which included modal verbs, verbs, adverbs, adjectives and phrases.

- (5) Modal Verb - "It is possible that the elite cue treatment could be dampened by the framing in the article ..." (PS1)
The modal verb withholds the writers' commitment towards the possible effect of the framing.
- (6) Verb - "... the major customers of these weapons manufacturers tend to be either their own national governments or the governments of other democracies..." (PS4)
The verb "tend" reduces the intensity of the claim that the writers present.
- (7) Adverb - "Those who survive likely face chronic diarrhea that leads to malnutrition and stunting ..." (PS10)
The adverb "likely" reduces the strength of the argument.
- (8) Adjective - "... the analytical framework developed in this paper has possible implications for ..."
The adjective indicates the implications that could happen. (PS2)
- (9) Phrase - "... to the best of our knowledge, no existing study addresses the implications of Sri Lanka's current FIT policy." (PS7)
Phrases such as "to the best of our knowledge" allow writers to reduce the force of their proposition by establishing caveats and signaling uncertainty.

The political science researchers' use of hedges to describe extant findings and their own results is reflective of the applied linguistics researchers in Khedri and Kritsis's (2018) study. This may be a feature of writing in the soft sciences, because the chemistry researchers' writing in research articles analysed by Khedri and Kritsis (2018) contained many hedges when making general assumptions. It seemed that in the soft sciences, it is important for researchers to signal subjectivity of information through hedging so that readers would view the propositions as an opinion rather than an absolute fact.

The next interactional marker described is self-mentions by writers. Self-mentions allow writers to establish a competent authorial presence in their writings and gain recognition (Hyland, 2005). Some of the commonly occurring items include "we", "our" in the multiple-authored articles and "I", "my", and "myself" in the single-authored articles. Throughout the corpus, self-mentions were mostly utilised by writers when outlining their research process. The International Journal of Public Policy (n=22) had very few self-mentions compared to the other two journals (International Journal: Canada's Journal of Global Policy Analysis, 180; Journal of Public and International Affairs, 106). Hyland (2001) stated that writers' inclusions of self-mentions are usually dependent on the convention of their disciplines but this is not the case for the 12 articles from the three political science journals because one journal was markedly different. The frequency pattern may suggest journal preferences in inclusion of self-mentions but an examination of the frequency of self-mentions per article indicated that it is possibly personal preference because some writers did not use any self-mention while others used a large number for articles published in the International Journal of Public and International Affairs. Excerpts (10)-(12) show how self-mentions appeared in the context of nouns, pronouns and possessive adjectives in the articles. These are the three parts of a sentence which are involved in self-mentions, different from other interactional metadiscourse markers.

- (10) Nouns - "The authors suspect that law enforcement and ASJ already provide and can continue to provide such a credible threat in Nueva Suyapa." (PS12)
The noun "the authors" is used to indicate the researchers' presence in the writing, and this usage is more formal than first person pronouns.
- (11) Pronouns - "... we then use the findings from these interviews to examine the potential applicability and implementation of ..." (PS12)
"We" is used to establish the writers' presence and emphasise their involvement in the analysis process.

- (12) Possessive adjectives - "My hypothesis at the beginning of this project was that there would..." (PS11)

"My" emphasises the author's association with their hypothesis, clarifying that it is their research.

Past studies like Hu and Cao (2015) have shown that self-mentions are frequently used in psychology research articles, more than in applied linguistics articles. In this sense, political science articles in the public policy discipline are more like applied linguistics where authorial presence is downplayed.

The next interactional metadiscourse category described is attitude markers. Each of the articles analysed contained attitude markers, showing the political science researchers' willingness to express their attitude towards a propositional content in their review of past findings, description of their own findings and the explanation of the contribution of their research. The high-frequency attitude markers were "important", "simply", "unfortunately", and "difficult". Among the three journals, the International Journal: Canada's Journal of Global Policy Analysis had the least number of attitude markers while the Journal of Public and International Affairs had the highest number. The use of attitude markers in the form of adverbs, adjectives and verbs is illustrated in Excerpts (13)-(15).

- (13) Adverbs - "Unfortunately, Sri Lanka failed to enforce the Petroleum Levies..." (PS7)

The adverb "unfortunately" illustrates how the writer feels about Sri Lanka's failure in enforcing the Petroleum Levies.

- (14) Adjectives - "These appalling statistics have brought homicide to the attention of the Honduran government." (PS12)

Here, the writer used "appalling" to express his horror at the vast number of homicides.

- (15) Verbs - "To recap, we expect consumers to ..." (PS1)

The author utilises the verb to express their prediction for the consumers.

The small percentage of attitude markers in the political science articles is to be expected because researchers have found a trend towards writers emphasising the results of the studies itself than themselves. For example, Hyland and Jiang's (2018) analysis of Applied Linguistics, Sociology, Biology and Electrical Engineering articles showed that while self-mentions increased over time, boosters and attitude markers showed the sharpest decline. Liu and Huang (2017) also found a low amount of attitude markers in English abstracts written by Chinese authors in the Economic Research Journal (China) in 2004, 2007, 2010 and 2013. In fact, their results are similar to the present study, where hedges and boosters ranked the highest among the markers, followed by self-mention attitude markers and engagement markers. Liu and Huang (2017) suggested that the frequent use of hedges indicate the influence of English convention in research writing, where tentativeness of propositions are used to avoid making generalisations.

Finally, the functions of engagement markers in the political science articles are described. Compared to other interactional metadiscourse markers, the researchers did not explicitly engage with their readers and get them involved into the discussion. To attain reader engagement, the writers typically used plural first person pronouns ("we", "our") and directives ("see", "consider", "note") and rhetorical questions. In comparison, the low-frequency engagement markers were personal asides (code glosses) and reference to shared knowledge. While engagement markers could be seen throughout the articles, it was typically found within the writers' concluding remarks where they shared their recommendation for future actions. The International Journal of Public Policy (n=39) had the least engagement markers compared to the other two journals (International Journal: Canada's Journal of Global Policy Analysis, 55; Journal of Public and International Affairs, 82). Excerpts (16)-(20) show the variety of expressions used to explicitly build a relationship with readers.

- (16) First person pronouns - "That is also a substantial risk to our democracy." (PS11)
By using the plural first person pronoun, the writer explicitly acknowledged the readers, especially those who are from the United States of America.
- (17) Questions - "... it begs the question: How can our society accept that risk?" (PS11)
The inclusion of a rhetorical question as the writer's closing remark implores readers to evaluate their stance on the subject matter.
- (18) Personal Asides or Code glosses - "I include a chart of which states (that remain in my data) ..." (PS11)
Brackets are used to provide a commentary on what goes into the chart.
- (19) Shared Knowledge - "It has been accepted that people working in occupations where they are expected to deal with the problems of others ... may suffer more stress ..." (PS5)
The expression "It has been accepted" alludes to the shared knowledge that the writer and readers have on the proposition.
- (20) Directives - "For example, imagine that the homicide rate across all Tegucigalpa drastically increases ..." (PS12)
By using directives, the writer instructs the readers to imagine a situation to get them on the same page.

Engagement marker is not frequently used in political science articles partly because the three political science journals had a global reach. Researchers would attempt to follow research writing conventions, which could explain the emphasis on the results of the studies itself than on the writers (Hyland & Jiang, 2018; Liu & Huang, 2017). One study in Turkey showed frequent and direct attempts at addressing readers. Akbas (2012) found that hedges, attitude markers and self-mentions dominated the writing of the English theses while the Turkish theses had a higher amount of engagement markers. The Turkish postgraduates accommodated their use of interactional discourse markers to the medium of writing. They adopted a more objective and tentative stance when writing in English but when they wrote in Turkish, they focused on engaging with their readers. As noted by the researcher however, the differences in their interactional strategies were only statistically significant in the introduction section.

To sum up, the frequent inclusion of hedges and boosters throughout the political science articles indicate the writers' familiarity in controlling their commitment level towards the propositional content. The writers appeared to be comfortable using booster items to project their confidence in their argument while maintaining some level of subjectivity through hedges. The other three interactional metadiscourse markers (self-mentions, attitude markers, engagement markers) bring the writer presence into the article. Generally, the political science researchers were able to express their attitudes clearly when needed while at the same time endorsing the inclusion of readers in their narrative. However, as the combined frequencies of attitude markers and engagement markers are less than 19%, the results may suggest subject-matter focus – concurring with the implications of the results on self-mentions. The political science researchers seemed to be more comfortable with expressing their commitment level towards the propositional content through the use of boosters and hedges.

4.3 Significant differences in categories of interactional metadiscourse markers used across journals

A chi-square test of independence showed that there were significant differences between the three journals on the use of interactional metadiscourse categories, $\chi^2 (8, N=2354) = 451.67, p=.01$. Articles in the three journals were different in their use of strategies to involve readers in the text development.

The chi-square test showed that the biggest difference between the observed and expected values is for boosters in the Journal of Public and International Affairs, indicating that this is the interactional metadiscourse category where the three journal articles are the most different from one another. The second biggest difference between the observed and expected values is for hedges, also in the Journal of Public and International Affairs, which is a student-run journal. It takes more than the role of chance to produce the large deviations between observed and expected value, and is likely linked to the characteristics of the journal. The difference between the observed and expected values is low for International Journal: Canada's Journal of Global Policy Analysis, which is a journal indexed by Thomson Reuters Social Science Citation Index. These results suggest that the model is a poor fit to the data for the student-run journal. This is probably because students are novice researchers and are still mastering the conventions of research writing, which is why their use of interactional metadiscourse categories are so different from other researchers in the field. In fact, previous studies have shown that novice researchers are less adept at using certain interactional metadiscourse markers (e.g., Asghar, 2015; Bax et al., 2019; Gholami et al., 2014).

CONCLUSION

The study examined the use of interactional metadiscourse markers in political science journal articles in the public policy discipline and produced three key findings. Firstly, boosters and hedges were the most frequently used interactional metadiscourse categories. The political science articles were low on reader engagement and authorial presence, as shown by relatively lower frequencies for attitude markers, engagement markers and self-mentions. Secondly, different categories of interactional metadiscourse markers were utilised to achieve different functions in various parts of the article. Boosters were mainly used to express certainty when reviewing past findings, emphasise the intensity of a situation and the contributions of the findings. Boosters in the political science articles were mainly modal verbs, adjectives, adverbs and phrases. On the other hand, writers mainly used hedges to withhold their commitment to a propositional content when they review past findings and describe their own findings. Hedges usually took the form of modal verbs and tentative words to present caveats to propositions. Self-mentions were mostly utilised by writers to show authorial presence when outlining their research process. Self-mentions were usually in the form of first person pronouns, nouns, pronouns and possessive adjectives. Writers used attitude markers to express their attitude towards a propositional content in their review of past findings, description of their own findings and explanation of the contribution of their findings. Attitude markers usually took the form of adverbs, adjectives and verbs. Engagement markers were commonly used to provide recommendations and represented through first person pronouns, directives, rhetorical questions, personal asides as well as reference to shared knowledge. Finally, there were significant differences in categories of interactional metadiscourse markers used across the three journals analysed, with the student-run journal being more different than the other two in its interactional metadiscoursal features. The findings suggest that while the writers viewed hedges and boosters as equally important for their proposition, but not all of them are comfortable with a high level of involvement, personality and stance in the text. The study showed that there were significant differences between the three journals on the use of interactional metadiscourse categories, with the journal publishing graduate students' articles showing the greatest difference between observed and expected values. The findings suggest that novice researchers with less experience in research writing have yet to demonstrate the interactional metadiscourse features that characterise the writing of more experienced researchers. In future research, researchers should investigate the multifaceted

influences on variations in interactional metadiscourse markers in journal articles by teasing apart the influences of discipline, rhetorical section of articles, experience in research writing, and language mastery.

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