



Interacting with readers: How nonnative authors of English use meta-discourse markers in their research article abstracts published in English medium journals

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Abstract

The use of appropriate rhetorical moves (RMs) and meta-discourse markers (MMs) improve the argumentative and persuasive force of academic texts, such as essays, thesis, seminar papers, and articles. However, authors from different language backgrounds and levels of expertise may use different RMs and MMs when writing in a foreign language. This study is aimed at describing how Indonesian authors in Applied Linguistics use RMs and MMs in their research article abstracts (RAAs) published in international and local journals. 20 RAAs published in international journals and 20 RAAs published in local journals were chosen for the corpora of this study. Swales (2009) five rhetorical moves for RAAs and Hyland's (2005) taxonomy of MMs were used as models in the analyses. The results reveal that different from international journal readers' expectations, Indonesian authors in Applied Linguistics use only 3 Moves (Moves 2, 3 & 4) classified as obligatory and 2 Moves (Moves 1 & 5) conventional. Also, they use interactive MMs far more frequently in Moves 3 and 4 because these two moves are relatively longer than the other three moves. As found in other similar studies, the Indonesian authors use interactive MMs far more frequently than interactional MMs because they concern more about their text cohesion, coherence, and convincing rather than their interaction with the potential readers.

Keywords: meta-discourse markers; research article abstract; faculty members; applied linguistics; local journals; international journals

1. Introduction

An abstract is an important part of any research article (RA) because it determines whether or not readers will go on reading the article. Although writers may write it last, the abstract is the first part of academic writing, such as RAs, thesis, and essays to be read by potential readers after the title. This is simply because the abstract is located just after the title and if the writers do not write it appropriately

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and interestingly, readers may not continue reading the text after reading the abstract (Belcher, 2009). Also, for readers where the availability of literature is limited, abstracts may be the only part of RAs that are available for them (Cargill and O'Connor, 2009 and Fartousi & Dumanic, 2012). According to Thyre (2008:40), an abstract is often reprinted by 'abstracting and indexing services connected with the journal to tell people what you did.' In other words, the quality of abstracts in academic texts is very important to consider if articles are to be read by prospective readers (Arsyad, 2014). Also, due to the competitiveness of publishing research articles in mainstream international journals, RAAs function as a way of promoting to potential readers about the research carried out and encouraging them to read the entire part of the article (Dahl, 2009; Hyland, 2000; Hyland & Tse, 2005; Lindeberg, 2004). According to Khedri et al., (2013), RAAs also help broaden the possibility of citation of academic publication as an added value in research dissemination of results and impact.

From their discourse organization point of view, RA abstracts have been known to consist of five different rhetorical moves (RMs); these are introduction, purpose, method, product, and conclusion (Hyland, 2004 and Swales & Feak, 2009). According to Hyland, the five different moves have different communicative purposes or functions. Hyland (2007) suggests that the communicative function of each move in a RA abstract as the following: Move-1 (introduction) is to establish the context of the paper and motivates the study or discussion; Move-2 (purpose) is to indicate purpose, thesis, or hypothesis, outlines the intention behind the paper; Move-3 (method) is to provide information on design, procedures, assumptions, approach, data, etc.; Move-4 (product or result) is to state main findings or results, the argument, or what was accomplished; and Move-5 (conclusion) is to interpret or extend results beyond the scope of the paper, draw inferences, points to applications or wider implications. However, the quality of an RAA is not only resolved by the use of these five moves but also by the way the moves are rhetorically addressed.

From the linguistic features point of view, academic texts including research article abstracts have been characterized by the use of meta-discourse markers (MMs); these refer to linguistic elements used by the writers in constructing their texts to interact with and affect readers of the texts. Through MMs, authors show their stances and attitudes towards their writing and their readers (Hyland, 2005 and Hyland & Tse, 2004). Therefore, authors intentionally choose particular MMs over the others to show their evaluation of the need of the potential readers for involvement and explanation (Hyland, 2010). This is aimed at showing the author's attempt to help communication run and to support their stance, and establish a connection with potential readers (Hyland, 1998). Studies on the use of MMs in a certain type of genre by a certain group of authors provide important pragmatic information in writing academic texts. This can be done by contrasting how people of different knowledge background, and different language and cultural background, apply MMs as discourse attempt to express their claims, research findings, research issues, interact with potential readers (Ädel, 2006).

1.1. Literature review

Contrastive studies on the use of MMs in a particular section of research articles (RAs) have been conducted by several discourse analysts, such as on introduction section by Estaji & Vafaeimeher (2015) and Sorahi & Shabani (2016), on methods section by Ghadiyani & Tahirian (2014), and on discussion section by Mina & Biria (2017). Estaji & Vafaeimeher (2015) found that there was no significant difference in the use of MMs in English RA introductions written by native speakers of English in Engineering disciplines (mechanical and electrical engineering). According to Estaji and Vafaeimeher, this is because these two disciplines are in the same field and both use the same or similar writing conventions. However, Sorahi and Shabani (2016) found some differences as well as similarities in the use of MMs by Iranian scholars writing in Persian and those by English scholars writing in English in the field of linguistics. According to Sorahi and Shobani, the similarity occurred

because the authors used the same conventions in the same discipline while the difference occurred because the two groups of authors have a different language background. Similarly, Ghadiyani and Tahirian (2014) found significant differences in the use of self-mentions in which English native speakers used them more frequently than Iranian authors did. This difference, according to Ghadiyani and Tahirian, is because of their first language and cultural effects and their limited knowledge of meta-discourse. Finally, Mina and Biria (2017) found that, unlike Iranian social science authors, Iranian authors in medical science preferred using interactional meta-discourse while both groups used interactive MMs more frequently than interactional ones in their RAs.

Contrastive and/or comparative studies on the use of MMs in RA abstracts have also been scrutinized by several language scholars, such as Hu and Cao (2011), Liu & Huang (2017), Wei & Duan (2019), Ozdemir & Longo (2014), Suntara & Chocktawikit (2018), Mansouri (2016), and Wang & Zhang (2016), Ashofteh et al. (2020) to name a few. Like the findings on other RA sections, studies on RAAs also found similarities and differences in the use of MMs; these differences and similarities can be because of language and cultural background and discipline convention influences on the authors who wrote the RAAs.

Wei & Duan (2019), for example, found that on the whole, Chinese authors used fewer MMs than English authors did but Chinese authors preferred using interactive meta-discourse to interactional ones while English authors preferred using interactional meta-discourse to interactive ones. Similarly, Liu & Huang (2017) found that Chinese authors used more hedges than Anglo-American authors did but no significant difference between these two groups of authors in the use of attitude markers. Hu and Cao (2011) also found that abstracts published in English medium journals use significantly more hedges than those published in Chinese medium journals and abstracts in articles of empirical research used significantly more boosters than those in non-empirical research.

Ozemir & Longo (2014) found that Turkish students used transitional meta-discourse (i.e., frame markers and hedges) more frequently than students from the United States of America (USA) while USA students used endophorics markers (i.e., code glosses, boosters, attitude markers, and self-mentions) more frequently than Turkish students did in their MA theses. Also, Suntara & Chokthawikit (2018) found that in public health RAAs, the most frequent use of meta-discourse devices were attitude markers, self-mentions, hedges, and boosters while the use of transition markers, such as addition, consequence, or contrastive connections was frequent to be persuasive. Wang & Zhang (2016) compared the use of MMs in mathematical and linguistics RAAs and found that more MMs were found more frequently in linguistics RAAs than in mathematical RAAs and interactive meta-discourse elements were used more frequently than interactional ones in both disciplines. However, Ashofteh et al. (2020) found that authors in Applied Linguistics published in reputable international journals used interactional MMs such as hedges more frequently in their RA abstracts; this is to anticipate possible challenges from other authors on their claims.

In the Indonesian research context, Basthomi (2006) found that Indonesian writers tend to write an indirect style abstract in their research articles in Applied Linguistics. According to Basthomi, this implies that the Indonesian writers used their Indonesian rhetorical style when writing an abstract in English and this is not the appropriate way of writing a journal article abstract in English. Similarly, Arsyad (2014) found that, unlike RAAs in international journals, the majority of RAAs written in Indonesian by Indonesian authors in social sciences and humanities have only three moves (i.e., purpose, methods, and results), the RAAs are mostly written in active sentences using present tense except for Move 3. According to Arsyad citing Ibnu (2003), this is probably because Indonesian journals prefer having a short abstract of 50 to 75 words which is written in one paragraph.

Studies on the use of MMs in English RAs by English and Indonesian authors were conducted by Sanjaya et al., (2015) and Mazidah (2019). Sanjaya et al. found that English RAs in Applied Linguistics written by English native speakers contain significantly more hedges than those written by Indonesian speakers. According to Sanjaya et al., this implies that Indonesian scholars badly need instruction in using interactional MMs particularly hedges when writing in English to meet the expectation of English readers. A more recent study on the use of MMs in RAAs was conducted by Mazidah (2019). She compared 50 English RAAs written by Indonesian authors and 50 RAAs written by native English speakers (NESs) in Applied Linguistics. She found that NES scholars use more interactive MMs such as transition markers and code glosses than Indonesian scholars do while Indonesian scholars use frame markers, evidential, and endophoric markers more than NES scholars do. Overall, the frequency of interactive MMs used by Indonesian and NES scholars is insignificantly different but Indonesian scholars use more varied MMs than NES scholars. According to Mazidah, this is mostly influenced by cultural interferences of Indonesian when writing in English.

1.2. The rationale for the Study and Research Questions

As discussed above, a comparative study on the use of MMs by Indonesian and English scholars in Applied Linguistics in their RAAs has been conducted by Mazidah (2019) but this study only investigated the use of interactive MMs and excluded interactional MMs. Also, this study only analyzed the use of MMs in the entire RAAs and did not look at the use of MMs in each of the five possible RMs in the abstracts. This is the main motivation for this study; that is to know how Indonesian authors in Applied Linguistics use MMs in the RMs of their RAAs published in English medium journals in Applied Linguistics. This study is important because different moves have different communicative functions (Swales and Feak, 2009 and Hyland, 2004 & 2007) and therefore, they may use different MMs (i.e., interactive and interactional) to realize the specific communicative functions. To guide this study, the following research questions are addressed.

Q1. What rhetorical moves are found in RAAs written by Indonesian authors in Applied Linguistics published in English medium journals?

Q2. How do Indonesian authors in Applied Linguistics use interactive MMs in each move of their RAAs published in English medium journals in Indonesia? and

Q3. How do Indonesian authors in Applied Linguistics use interactional MMs in each move of their RAAs published in English medium journals in Indonesia?

2. Method

2.1. The corpus of the Study

This study employed quantitative analyses following Gillaerts & Van de Valde (2010) with a focus on frequency counts and manual text analysis of a corpus of 40 RA abstracts written in English by two groups of Indonesian authors in Applied Linguistics (i.e., expert and non-expert Indonesian authors) published in local and international journals. 40 RAAs were taken from the recent issues of international and local journals in Applied Linguistics published in English medium journals in Indonesia. In the first set of corpora were 20 RA abstracts written by Indonesian authors in Applied Linguistics taken from two different international journals (i.e., Indonesian Journal of Applied Linguistics (IJAL) and teachers of English as a foreign language in Indonesia (TEFLIN) Journal. The reasons for choosing these two journals are the followings: 1) these journals are mainstream international journals indexed by Scopus showing that these journals publish high-quality articles in Applied Linguistics; 2) these journals publish RAs in Applied Linguistics; 3) the majority of authors

and readers of these two journals are Indonesian faculty members or English as a Foreign (EFL) teachers teaching at a high-school or university in Indonesia; 4) these two journals have an open access system and therefore, the article can be easily downloaded for free; and 5) the articles published in these journals use Introduction, Method, Results and Discussion and Conclusion (IMRDC) format. The average length of the abstracts in this set of the corpus is 216 words per abstract.

In another set of corpora were 20 RAAs in Applied Linguistics written by Indonesian authors taken from the Journal of English as a foreign language (JEFL) and journal of Applied Linguistics and Literature (JOALL). The reasons for choosing these two journals are the followings: 1) these journals are national accredited journals with the values of ‘Sinta’ 2 and 3; 2) these journals publish RAs in Applied Linguistics; 3) the majority of authors and readers of these two journals are Indonesian faculty members, English teachers teaching English as a foreign language or postgraduate students of English Education Study Program; 4) these journals have an open access system and therefore the articles can be easily downloaded for free, and 5) the articles published in these two journals use IMRDC format. The articles from these journals were taken from the most recent versions of journals 20 to ensure the most recent features of RAs written by Indonesian authors in AL were published in reputable international or national accredited journals. The average length of the abstracts in this set of the corpus is 176 words per abstract.

There is no specific theoretical reason to choose 40 RA abstracts from the four different journals to include in the corpora of this study; this is only to ensure that the number of abstracts included in this study represents the rhetorical and linguistic features of RA abstracts written by expert and non-expert Indonesian authors and published in national and international journals in Applied Linguistics. To compare with other studies using abstracts as the object of analysis, Gillaerts & Van de Velde (2010), for example, used 72 RA abstracts in their corpora, Khedri et al., (2013) used only 60 RA abstracts in their corpus, while Ozdemir & Longo (2014) used only 52 RA abstracts in their corpora. However, the majority of these studies investigated only one type of MMs either interactive or interactional while this study analyzed both types of MMs. Thus, 40 RA abstracts are considered sufficient to allow us to figure out the typical rhetorical Moves, MMs used in each move, and types of MMs used in the RAAs written by Indonesian authors in Applied Linguistics.

2.2. Analytical Framework

A research article abstract (RAA) may have up to five rhetorical moves (RMs) based on the communicative purpose of each clause or a set of clauses in the abstract. Paltridge & Starfield (2007) suggest that an abstract should address five moves of the research project which have been completed: the main aims, specific objectives, reasons, processes, and results of the research. However, according to Bathia (1993), an abstract should contain only four moves: the aim, method, findings, and conclusions. Besides, according to Swales et al., (2009) most recent genre analysis studies on RAAs reveal that RAAs in various languages and various disciplines have five moves as in the following table.

Table 1. Rhetorical Moves in a Research Article Abstract (Swales et al., 2009)

Rhetorical Moves	Communicative Purposes
Move 1: background/ introduction/ situation	rhetorical work to answer the question of what the writer/s know about the research topic
Move 2: the purpose of the research	rhetorical work to explain what the research is about
Move 3: methods/materials/ subjects/procedures	rhetorical work to tell readers how the research is conducted

Move 4: results/findings	rhetorical work to address what the researcher/s discover from the research
Move 5: discussion/ conclusion/ significance	rhetorical work aimed at discussing what the research results mean.

However, although the terms for each particular move may vary the content of the moves is similar. Particular sets of terminology for each move may be common in a particular discipline while other sets of terminology are more commonly used in other disciplines. In the present study, the above five moves were used as a guideline. In this study, this five-move model was used as a guideline.

Several taxonomies of meta-discourse have been suggested by discourse analysts, such as by Van de Kople (1985), Crismore, et al., (1993), and Hyland & Tse (2004); however, in this study Hyland's (2005) taxonomy was used. This is because this taxonomy is the most frequently used in previous studies. This taxonomy is also the most complete and theoretically acceptable model (Thompson, 2008, as cited in Jiang & Hyland, 2016,). Hyland (2005) classifies MMs into two groups based on their function (i.e., interactive meta-discourse used to help and guide readers throughout the text and interactional meta-discourse used to involve potential readers in the text). Through interactive meta-discourse elements, writers show their assessment of the potential readers' schema on the subject being discussed, their comprehension ability, and their need for elaboration, and are used to "organize propositional information in ways that a projected target audience is likely to find coherent and convincing" (Hyland, 2005, p. 50). According to Hyland, the interactional markers help writers show their existence and attitude as well as develop writer-reader interaction such as by asserting disbelief or confidence and approach on a hypothesis (Hyland, 2005 and 2010). The main types and subcategories of the interactive and interactional meta-discourse with examples are given in Table 1 below.

Table 2. Hyland's Interpersonal model of meta-discourse elements in academic texts (Adapted from Hyland, 2005 & 2010)

Category	Function	Examples
Interactive Meta-discourse	Aimed at helping guide potential readers through the text to help meet their needs, setting out arguments so that they recover the writer's preferred interpretations and goals.	
Transitions	Expressive relations between main clauses	Addition: in addition, and, furthermore, moreover, by the way, etc. Comparison: similarly, likewise, equally, in the same way, correspondingly, however, but, on the contrary, in contrast, on the other hand, etc. Consequence: thus, therefore, consequently, in conclusion, admittedly, nevertheless, anyway, in any case, of course, etc.
Frame-markers	Refer to discourse acts, sequences, or stages	Sequence: first, then, ½, a/b, at the same time, next, etc. Stages: finally, to conclude; in sum, to summarize, by way of introduction, etc. Goal: my purpose is, I argue here, I hope to persuade, there are several reasons why, etc.
Endophoric markers	Refer to the information in other parts of the internal text	See Figure 2, refer to the next section, as noted above, etc.

Evidentials	Refer to information from other texts	According to X, Y relates ..., Z claims that..., etc.
Code glosses	Elaborate proportional meanings	Namely, e.g., such as this is called, in other words, that is, this can be defined as, for example, etc.
Interactional discourse	meta-	Aimed at involving potential readers in the text to make the writer's views explicit and allow them to respond to the unfolding texts.
Hedges	Withhold commitment and open dialogue	Epistemic verbs: might, may, must (it must be two o'clock. Probability adverb: maybe, probably, perhaps
Boosters	Emphasize certainty or close dialogue	In fact, definitely, it is clear that, obviously, clearly, demonstrate, etc.
Attitude markers	Express writer's attitude toward a proposition	Attitude verbs: agree, prefer, etc. Sentence adverbs: unfortunately, hopefully, etc. Adjectives: appropriate, remarkable, logical, etc.
Self-mentions	Explicit reference to authors	I, me, mine, we, our, ours, etc.
Engagement markers	Explicitly build a relationship with readers	Meeting reader's expectation: you, your, (inclusive) we, by the way, you may notice, etc. Positioning readers: see, note, consider, should, must, have to, you can see that; etc.

To give a better understanding of the use of MMs in RAs, below are examples of MMs taken from the actual texts.

Transitions

These include learners' attitudes to reading and English more generally (see Sadtono, 1997), motivation (see Kweldju, 1996), text genres (see Rukmini, 2004), teaching methods (see Cahyono & Widiati, 2006), and L1 reading and literacy practices (see Rusfandi, 2013). In addition, as I have argued elsewhere, Indonesian learners' shortcomings in English vocabulary and grammar skills are a significant source of reading difficulty (Sahiruddin, 2008). (TEFLIN-2)

Frame markers

The present study mainly focuses on these three main aspects: whether the correlation between the predictor variables and the criterion variable in the regression equation is significant; if so, how much is the coefficient of determination of the correlation; finally, what is the beta weight of each of the predictor variables (TEFLIN-5).

Endophoric

The responses were more than 100% as one participant gave more than one response (see Figure 1) (TEFLIN-1).

Evidential

According to Dewey (1938), values deal with things, beliefs, actions, emotions, and attitudes, which are found acceptable, desirable, and even praiseworthy to the individual, society, or both (IJAL-3).

Code glosses

Funeral services in today Javanese society remain as described by Geertz (1973), namely without hysterical sorrow created by uncontrollable emotional sobbing or wailing (IJAL-1).

Hedges

Based on the data in IE2, the teacher informed that the students rarely responded to her questions. She assumed that this might be due to the fact that they have not grasped the lessons given to them in class (IJAL-2).

Boosters

In general, when undergraduate students are first admitted to the university, they are not familiar with particular academic cultures that they should engage in (Hutchings, 2013). In fact, an academic writing culture is hardly introduced properly to new students, who are simply expected to immediately adapt to it by their institution and instructors, resulting in feelings of alienation among many new students ... (IJAL-10).

Attitude markers

In the Indonesian educational system, learner autonomy has been demanded to be promoted in the teaching and learning process of recent curriculum implementation. Unfortunately, it cannot be denied that learner autonomy still poses a challenge to be implemented in Indonesia since teacher-centered learning is still dominant.

Self-mentions

In this paper, I adopt the two definitions of creativity (TEFLIN-1).

Engagement marker

This study, then, aims to open a new variation to the data, that is, the use of connectors in journal research articles indexed in Scopus and non-Scopus, ... Note that any scientific journal research articles may have undergone an editing process; however, it is not yet clear whether the editing process is concerned with the use of logical connectors or predominantly focuses on the surface of linguistic corrections and writing formats (IJAL-7).

2.3. Data Analysis Procedure

All RAAs from the two sets of corpora were analyzed using three-step processes: identifying, classifying, and interpreting. The identification of rhetorical moves was conducted by looking at the specific words or phrases, discourse markers and interpreting from the context following the five-move model of abstract as suggested by Swales (2009) while the identification of MMs was conducted following the list of meta-discourse terms or phrases as suggested by Hyland (2005 and 2010). Then, an independent rater with a doctoral degree in Language Education was asked to identify the words/phrases classified as RMs and MMs and their functions in 12 or 20% of the RAAs randomly chosen from the corpora of this study to increase the validity of the results. Before asking to analyze the RMs and MMs in the randomly chosen RAAs; she was taught examples of how to identify potential moves and meta-discourse elements in the target text. Discussions were held to resolve cases of disagreement between and raters during the training; this was to make sure that some words or terms, phrases, or clauses with overlapping functions, and each specified lexical item or phrase behaved accordingly. Then, she was asked to identify all RMs and MMs (i.e., interactive and interactional) in the 12 RAAs.

After both raters (i.e., the researcher and an independent rater) successfully extracted the RMs and MMs, kappa statistics analysis was used to see the significant difference between data analysis results from the researcher and independent raters. According to Brown (1996), the maximum score in Cohen's Kappa statistical analysis is 1.00 and the lowest is 0.00. Then, following Kanoksilapathan

(2005), if Cohen's Kappa score is less than 0.40 it was considered 'poor', between 0.40–0.59 'fair', between 0.60–0.74 'good', and 0.75 or above 'excellent'.

2.4. Categorizing the Frequency of RMs in the RAAs

The appearance of RMs in the RAAs was categorized into obligatory, conventional, or optional based on their frequency of occurrence. Following Kanoksilapatham (2005), if a Move appears in all RAAs (100%), it was categorized as obligatory; if it appears between 60-99% of the RAAs, it was categorized as conventional and if it appears in less than 60% of the RAAs, it was categorized as optional. The main purpose of categorizing the Moves into 3 categories, according to Kanoksilapatham, is to establish which rhetorical Move out of the possible Moves is more conventional than the others.

3. Results and Discussion

The obtained kappa score agreements between the researcher and the independent rater were 0.90 for RMs, 0.82 for interactive MMs, and 0.80 for interactional MMs. Thus, the average Kappa score for this study is 0.84. Therefore, following the score classification suggested by Kanoksilapatham (2005), the validity category of the data analysis results in this study is considered 'excellent'.

3.1. The Frequency of Rhetorical Moves in the RA Abstracts

The first analysis was on the frequency of RMs found in the abstracts of the two corpora of this study. The results are shown in the following table.

Table 3. The Frequency of Moves in the RAAs

Moves	Journals in Applied Linguistics		Total N=40	Category
	Local Journals n=20	International Journals n=20		
Move 1	10 (50%)	15 (75%)	25 (62%)	Conventional
Move 2	20 (100%)	20 (100%)	40 (100%)	Obligatory
Move 3	20 (100%)	20 (100%)	40 (100%)	Obligatory
Move 4	20 (100%)	20 (100%)	40 (100%)	Obligatory
Move 5	17 (85%)	18 (90%)	35 (87.5%)	Conventional

Table 3 shows that all RAAs written by Indonesian authors published in local and international journals have three obligatory Moves (Moves 1, 2, and 3) and two conventional moves (Moves 1 and 2). It is interesting to notice that, there is no important difference between these two groups of RAAs in terms of the occurrence of RMs. Also, although published in reputable international journals several RAAs written by Indonesian authors in Applied Linguistics do not have a Move 1 (background/introduction/situation). Below are examples of RAAs with these five moves taken from the corpus of this study.

Example 1

(S-1) Children's language development is an arguably integral part of early childhood education. This research departs from the assumption that morphological awareness encompassing sensitivity to word units plays a critical role in ascertaining the success of children's reading skills in school. (S-3)

The purpose of the present study was two-fold: i) to assess the level of morphological awareness of preschool children, and ii) to reveal the types of learning and guidance activities in the classroom that facilitate the development of children's linguistic awareness and early literacy in general. (S-4) Data were obtained through a set of morphological awareness tasks (a judgment task and a word analogy task) to kindergarten students aged 4-6 years, classroom observations, and interviews with the teachers. By virtue of an exploratory nature of this research, the data stemmed from one kindergarten in a North Bandung area, Indonesia. (S-6) Findings reveal that kindergarten children, in general, have demonstrated early signs of morphological awareness owing to ongoing language development. Their morphological awareness level appears to be contingent on the extent of their morphological knowledge. Pedagogically, it is found that the teachers have provided the students with various types of morphological knowledge learning and guidance activities in the school to help hone the awareness. (S-9) Implicationally, explicit morphological awareness and vocabulary instruction need to be implemented in a preschool context to prepare children's later academic success.

The above abstract is taken from an article titled 'Kindergartners' morphological awareness, its instruction, and guidance in the Indonesian context' published in the *International Journal Indonesian Journal of Applied Linguistics (IJAL)*. As indicated in the abstract, sentence 1 (S-1) is classified as Move 1 (background/introduction/situation), sentence 3 (S-3) is Move 2 (objective), sentence 4 (S-4) is Move 3 (method), sentence 6 (S-6) is Move 4 (results or findings), and sentence 9 (S-9) is Move 5 (conclusion). Thus, this abstract is considered a complete abstract since it has five moves.

The data show that the majority of the RAAs in the corpora of this study have only three moves classified as obligatory (Moves 2, 3, and 4) and two moves (Move 1 and 5) classified as conventional. This finding is in line with that of Arsyad (2014) and Arono (2018) who also found that the majority of RAAs in social sciences and humanities written by Indonesian authors in their data have only three compulsory moves. According to Arsyad and Arono following Ibnu (2003), this is because journals in social sciences and humanities in Indonesia tend to have a short abstract of 50 to 75 words and therefore, they have fewer moves. However, this finding is different from those in RAAs published in international journals published outside Indonesia as suggested by Paltridge (2007), Belcher (2009), and Swales and Feak (2009) claiming that an RAA should have five different moves. According to Swales and Feak, the five moves in an RAA are important to answer five different questions; these are 1) what do we know about the topic and why is the topic important? 2) what is this study about? 3) how was it done? 4) what was discovered and 5) what do the findings mean? In other words, unlike international authors, Indonesian authors in *Applied Linguistics* tend to write shorter abstracts consisting of fewer moves when writing RAAs in English to be published in English medium journals in Indonesia.

Move 1 (background/introduction/situation) which is written to answer the question of what the writers know about the research topic (Swales and Feak, 2009) in particular is an important move in an RAA because, through this move, writers attempt to attract readers' attention to like reading the whole abstract and eventually the entire article. Thus, if readers are interested in reading the abstract from the first sentence, it is potential that they will read the entire article. This is because the abstract is considered the door into an article and an indicator of the quality of the article (Al-khasauneh, 2017). Similarly, according to Gilaerts & Van de Velde (2010), the competing atmosphere of the research and publication processes causes RA abstracts to act as an advertisement to attract readers to the entire text of the research article. Thus, the introductory statement in an abstract is very crucial, and therefore, authors should address this rhetorical move especially when writing an article to be published in reputable international journals as expected by international readers.

3.2. Distribution of Interactive MMs in the Five Different Moves

The second analysis was done on the use of interactive MMs in the five different moves in the two sets of corpora. The result is shown in the table below.

Table 4. The Frequency of Interactive MMs in Each Move of the RAAs

Moves	International Journals n=20	Local Journals n=20	Total N=40	%
Move 1 (introduction)	25	5	30	15.30
Move 2 (purpose)	16	14	30	15.30
Move 3 (method)	25	38	63	32.14
Move 4 (results)	28	20	48	24.49
Move 5 (conclusion)	13	12	25	12.76
Total	107	89	196	100

Table 4 shows that the most frequent interactive MMs are found in Move 3 (methods) in the two sets of RAAs 63 (32.14%); the second most frequent ones are found in Move 4 (results or findings) while the least frequent ones are found in Move 5 (conclusion). Below is an example of an RAA taken from the data of this study containing interactive meta-discourse elements in the existing moves.

Example 2

(S-1) This study investigates individual differences arising from strategy instruction, questioning strategy, **based on** the problems found through miscue analysis. (S-2) This qualitative study **also** investigates students' motivation toward the strategy taught. (S-3) The participants were a college student in Taiwan, consisted of one high-achieving student **and** one low-achieving student. (S-4) Both were on **the same** language proficiency level (level C). (S-5) They were asked to complete miscue pre **and** post-test **and** took eight meetings of tutorials (four meetings for teacher-generated questions **and** four meetings for student-generated questions). (S-6) An interview was **also** conducted to find out their motivation toward the strategy. (S-7) The instructional materials were taken from an English magazine specially designed for Taiwanese, **called** Studio Classroom. (S-8) Results indicated that the strategy did not work **well** in both students as their motivation interfered with their reading performance. (S-9) This study **concludes** that the strategy works better in higher motivation students. (S-10) Since motivation affects students' reading performance, **therefore**, this study suggests that raising students' motivation in the teaching process is crucial to reach better reading performance.

The above abstract was taken from an article titled 'Use of questioning strategy to facilitate students' reading comprehension in Taiwan' written by Ike Irawati and published in Journal of English as a Foreign Language (JEFL) Vol. 9, No. 2, 2019. Sentence 1 (S-1) and Sentence 2 (S-2) in the above abstract are classified as Move 2 (objective) while sentence 3 to Sentence 7 are Move 3 (method). Sentence 8 is Move 4 (results) and sentences 9 and 10 are Move 5 (conclusion). As also indicated in the abstract, in each Move there is at least one discourse marker such as, **based on** (Evidentials) and **also** (Transition) in Move 2, **and** (Transition), **the same** (Transition) and **also** (Transition) in Move 3, and **called** (Code glosses) in Move 4 and **concludes** (Frame markers) and **therefore** (Transition) in Move 5. As can be seen in the above text, the most frequent MMs are transitions or linguistic elements expressing relations between main clauses.

These results reveal that the majority of Indonesian authors in Applied Linguistics in the corpora of this study use interactive MMs in Move 3 (method) and Move 4 (results). This is probably because these two moves are relatively longer in terms of the number of words and contain more items than the other 3 moves, i.e., Moves 1 (introduction), 2 (purpose), and 5 (conclusion). According to Swales and Feak (2009), Move 3 can contain information about data, participants, the length of the study, location as well as some indications of the methods used in the study. In other words, a lot of information needs to be congested into a small slot of Move 3 in the abstract. Also, in Move 3, authors must argue convincingly that their research method is appropriate, valid, and reliable and for this purpose, they need to use MMs appropriately. Similar results were addressed by Ashofteh et al. (2020) where they found that authors in Applied Linguistics use more interactional MMs such as hedges in their RA abstracts to allow other authors to challenge their research findings.

In Move 4 (results), authors also need a larger space to present the general and specific research findings (Swales and Feak, 2009). According to Swales and Feak, in Move 4 authors are requested to convince readers that their research findings are important and useful because they contribute to the available knowledge in the literature. Therefore, interactive MMs seem to be used by the authors to help their readers comprehend and interpret their texts in these two moves (Ozdemir & Longo, 2013). Similarly, Hyland (2005) suggests that writers show their evaluation of the potential readers' knowledge on the topic being discussed, their comprehension ability, their need for explanation; for this purpose, interactive MMs are used to organize information as well as possible so that potential readers will find the continuity and cogent in their texts.

3.3. Distribution of Interactional MMs in the RAAs

An analysis was also done on the use of interactional MMs in RAAs of the sets of corpora (RAAs from international journals and RAAs from local journals) to answer research question number 3. The result is displayed in Table 4 below.

Table 5. Frequency of Interactional MMs in the RAAs

Moves	International n=20	Journals	Local Journals n=20	Total N=40	%
Move 1 (introduction)	2		2	4	22.22
Move 2 (purpose)	1		-	1	5.56
Move 3 (method)	-		2	2	11.11
Move 4 (results)	3		2	5	27.77
Move 5 (conclusion)	5		1	6	33.33
Total	11		7	18	100

As seen in Table 5, the Indonesian authors both from local and international journals do not use interactional MMs frequently in their RAAs, and compared to the use of interactive MMs, their interactional MMs are far smaller in frequency. It is also interesting to notice that there is no important difference between local and international journals in the total frequency use of interactional MMs. Below is an example of RAA taken from the data of this study containing interactional meta-discourse elements in the existing moves.

Example 3

(S-1) The present study involved one EFL learner who was regarded as successful, not only in understanding second language acquisition theories but also in demonstrating exceptional language skills thus far. (S-2) An in-depth semistructured interview was administered with three key objectives – to identify features of language inputs that enable her to develop English skills, to investigate her situation in the learning environment, and to reveal her motivation in learning the language. (S-3) The participant was a successful EFL learner who was determined by the excellent TOEFL score and performed an outstanding achievement in English proven by the academic transcript. (S-4) The data were gathered by means of a semi-structured interview and analyzed through the transcription process, coding, and drawing the conclusion. (S-5) The results indicated that joining an intensive class and integrating English in her daily activities had primarily contributed to her language skills improvement. (S-6) While the physical environment slightly provided a conducive environment for learning English, her academic environment was steadily supporting her. (S-7) In addition to the importance of English in her future, the participant was successful in keeping her motivation to learn the language. (S-8) These findings **could** contribute to a better understanding of how Indonesian EFL learners successfully acquire a foreign language.

Example 3 was taken from an article titled ‘Language input, learning environment, and motivation of a successful EFL learner’ written by Arif Nugroho, M. Rizal Akbar Zamzami & Nur Farah Ukhrowiyah and published in Journal of English as a Foreign Language (JEFL), Volume 10, Number 1 in 2020. As indicated in Example 3, there are only two interactional MMs: **regarded** (Hedges) in sentence 1 (S-1) or Move 3 (method) and **could** (Hedges) in sentence 8 (S-8) or Move 5 (conclusion). This example also shows that interactional MMs are very rare in RAAs in Applied Linguistics written by Indonesian authors and published in English medium journals.

The findings show that Indonesian authors in Applied Linguistics do not use interactional MMs as frequently as they use interactive MMs in every move when writing either in local or international English medium journals. In other words, for Indonesian authors, interactive MMs are far more important than interactional MMs to use in their RAAs. Hyland (2005) claims that interactional MMs help manage writer’s visibility and build a writer-reader relationship by expressing doubt or certainty, as well as attitudes, towards propositions. Thus Indonesian authors do not seem to use these linguistic elements in all moves of their RAAs published in local and international English medium journals because they concern more on the cohesion, coherence, and convincing of their text rather than interaction with prospective readers.

The study by Mansoury et al., (2016) also found a similar finding in which English and Persian authors use much fewer interactional MMs in their RAAs rather than interactive MMs. According to Mansoury et al., this shows that both groups of authors perceive that assuring textual readability is more important than developing an interpersonal connection with readers, and establishing text coherence and convincing is more important than involving readers in the argument in the RAAs. Similarly, Wei & Duan (2019) found that English authors use more interactional MMs than Chinese authors do but Chinese authors use more interactive MMs than their English counterparts. This is because, according to Wei and Duan, Chinese scholars emphasize more on helping readers comprehend their texts while English scholars more on developing author identification and involving their readers in their texts. Thus, as authors writing in a second or foreign language, Indonesian authors in Applied Linguistics may adopt the same view in which text cohesion, coherence, and argument credibility are more important than affecting readers in their texts when writing RAAs in English. Aktay (2002) also suggests that the use of MMs such as in giving advice (i.e., hedges and boosters) is related to the culture and therefore the way people use them may be different from one language/culture to another language/culture.

4. Conclusions

From the findings of this study, several conclusions can be drawn. First, unlike international authors, the majority of Indonesian authors in the corpora of this study write only three moves classified as obligatory (Moves 2, 3, and 4) and two moves (Move 1 and 5) classified as conventional moves in their RAAs. This is probably, as a comment practice in the Indonesian academic writing style, RAAs in journal articles are written in a limited number of words. Second, the majority of Indonesian authors in Applied Linguistics use interactive MMs more frequently in Move 3 (method) and Move 4 (results); this is because they need a larger space to accommodate necessary information addressed in these two moves. Finally, Indonesian authors in Applied Linguistics do not use interactional MMs as frequently as they use interactive MMs in every move when writing either in local or international English medium journals. In other words, as other authors writing in a second or foreign language, for Indonesian authors, interactive MMs are far more important than interactional MMs to use in their RAAs. This is probably because they are concerned with the readability of their texts rather than activating their prospective readers into their texts.

When writing RAs in English to be published in an international journal outside Indonesia, Indonesian authors should comply with the rhetorical style and linguistic features commonly found in RAs published in international journals for international readers. This is because, if they write RAs including RAAs in a different rhetorical style and linguistic features such as MMs, international readers including journal editors and reviewers may find their manuscript incomprehensible or poorly written and this will lower the prospect of their manuscript being accepted for publication in reputable international journals. Therefore, Indonesian authors should learn and be familiar with the rhetorical and linguistic characteristics of English RAs published in international journals in the same field of discipline as already suggested by genre analysts from their study results.

References

- Ädel A. (2006). *Meta-discourse in L1 and L2 English*. Philadelphia, PA: John Benjamins.
- Aktay, S. A. (2020). ‘The metadiscursive aspects of advice-giving: Hedging and boosting in an agony aunt’s column’, *Journal of Language and Linguistic Studies*, 16(3), 1611-1620. Doi: 10.17263/jlls.803918
- Al-khasauneh, F.M. (2017). ‘A Genre Analysis of Research Article Abstracts Written by Native and Non-Native Speakers of English’, *Journal of Applied Linguistics and Language Research*, 4(1), 1-13 Available online at www.jallr.com.
- Arono, A. (2018). ‘Abstract Thesis Analysis in Linguistics, Literature, and Language Teaching Fields’, *Advances in Social Science, Education and Humanities Research*, 295, 38-43. DOI <https://doi.org/10.2991/icetep-18.2019.10>
- Arsyad, S. (2014). ‘The Discourse Structure and Linguistic Features of Research Article Abstracts in English by Indonesian Academics’, *Asian ESP Journal*, 10(2), 191-224. <https://eric.ed.gov/?id=ED569125>
- Ashofteh, Z., Shirvan, M. E., Golparvar, S. E. (2020). The move structure of abstracts in applied linguistics research articles in light of the distribution and functions of metadiscourse markers, *Journal of Language and Linguistic Studies*, 16(4), 2077-2096. Doi:10.17263/jlls.851035
- Belcher, W.L. (2009). *Writing your journal article in twelve weeks: A guide to academic publishing success*. Thousand Oaks, CA: SAGE Publications, Inc.

- Basthomi, Y. (2006). 'The Rhetoric of Article Abstracts: a Sweep Through the Literature and a Preliminary Study', *Journal of Bahasa dan Seni*, 34(2), 174-189.
- Bhatia, V.K. (1993). *Analyzing genre*. London: Longman.
- Brown, J.D. (1996). *Testing in language programs*. Englewood Cliffs, NJ: Prentice-Hall Regents.
- Cargill, M. & Patrick O'C. (2009). *Writing a scientific research article: Strategy and steps*, Oxford: John Wiley and Son Ltd.
- Crismore A., Markkanen R. & Steffensen M. (1993). 'Meta-discourse in persuasive writing: A study of texts written by American and Finnish university students', *Written Communication*, 10(1), 39–71. <https://doi.org/10.1177/0741088393010001002>
- Dahl, T. (2009). *Author identity in economics and linguistics abstracts* in E. Suomela-Salmi, & F. Dervin, Eds., (pp.123-134). <https://doi.org/10.1075/pbns.193.08dah>
- Estaji, M. & Vafaeimehr, R. (2015). 'A comparative analysis of interactional meta-discourse markers in the introduction and conclusion sections of mechanical and electrical engineering research papers', *Iranian Journal of Language Teaching Research*, 3(1), 37-56. <https://files.eric.ed.gov/fulltext/EJ1127334.pdf>
- Fartousi, H & Dumaniq, F.P. (2012). 'Rhetorical Pattern of Conference Abstracts: A Rhetorical Analysis of sampled Abstracts Presented at FISS Conference', *Advances in Asian Social Science*, 1(1), 162-65.
- Ghadyani, F & Tahirian, M.H. (2014). 'Interactional Markers in English Medical Research Articles Written by Iranian and Native Authors: A Contrastive Meta-discourse Analysis of Method Section', *Advances in Language and Literary Studies*, 5(4), 137-50. Doi:10.7575/aiac.all.v.5n.4p.137
- Gillaerts, P. & Van de Velde, F. (2010). 'Interactional meta-discourse in research article abstracts'. *Journal of English for Academic Purposes*, 9, 128–139. <https://doi.org/10.1016/j.jeap.2010.02.004>
- Hu G. & Cao, F. (2011). 'Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals', *Journal of Pragmatics*, 43, 2795–2809. <https://doi.org/10.1016/j.pragma.2011.04.007>
- Hyland, K. (1998). Persuasion and context: The pragmatics of meta-discourse. *Journal of Pragmatics* 30, 437–455. [https://doi.org/10.1016/S0378-2166\(98\)00009-5](https://doi.org/10.1016/S0378-2166(98)00009-5)
- Hyland, K. (2000). *Disciplinary Discourses: Social Interactions in Academic Writing*. New York: Pearson Education Inc.
- Hyland, K. (2004). 'Disciplinary interactions: Meta-discourse in L2 postgraduate writing', *Journal of Second Language Writing*, 13, 133–151. <https://doi.org/10.1016/j.jslw.2004.02.001>
- Hyland, K. (2005). *Meta-discourse: Exploring Interaction in Writing*. London: Continuum.
- Hyland, K. (2007). 'Applying a gloss: Exemplifying and reformulating in academic discourse'. *Applied Linguistics*, 28(2), 266–285. doi:10.1093/applin/amm011
- Hyland, K. (2010). 'Community and individuality: Performing identity in Applied Linguistics'. *Written Communication*, 27, 159-188. <https://doi.org/10.1177/0741088309357846>
- Hyland K. and Tse, P. (2005). 'Hooking the reader: A corpus study of evaluative that in abstracts. *English for Specific Purposes*, 24(2), 123–139. <https://doi.org/10.1016/j.esp.2004.02.002>

- Ibnu, S. (2003). 'Isi dan Format Jurnal Ilmiah' (Content and Format of Scientific Journal) in Mulyadi Guntur Waseso and Ali Saukah (eds.), 25-40.
- Jiang, F.K. & Hyland, K. (2016). Nouns and Academic Interactions: A Neglected Feature of Meta-discourse. *Applied linguistics*, 37(6), 1-15. <https://doi.org/10.1093/applin/amw023>
- Kanoksilapatham, B. (2005). 'Rhetorical structure of biochemistry research articles', *English for Specific Purposes*, 24, 269–292. <https://doi.org/10.1016/j.esp.2004.08.003>
- Khedri, M., Heng, C.S. & Ebrahimi, S.F. (2013). An exploration of interactive metadiscourse markers in academic research article abstracts in two disciplines, *Discourse Studies*, 15(3), 319–331. <https://doi.org/10.1177/1461445613480588>
- Lindeberg A.C. (2004). Promotion and Politeness: *Conflicting Scholarly Rhetoric in Three Disciplines*. Finland: Abo Akademi University Press.
- Liu, P. & Huang, X. (2017). A Study of Interactional Meta-discourse in English Abstracts of Chinese Economics Research Articles, *Higher Education Studies*, 7(3), 25-41. DOI: 10.5539/hes.v7n3p25
- Mansouri, S., Najafabadi, M.M. & Boroujeni, S.S. (2016). Meta-discourse in Research Article Abstracts: A Cross-Lingual and Disciplinary Investigation, *Journal of Applied Linguistics and Language Research*, 3(4), 296-307.
- Mazidah, E.N. (2019). 'A Comparison of the Interactive Meta-discourse Markers in the Abstracts of Articles Written by Indonesian and NES Scholars', *Etnolinguist*, 3(1), 57-73. <http://dx.doi.org/10.20473/etno.v3i1.12995>. <http://dx.doi.org/10.20473/etno.v3i1.12995>
- Mina, K.G. & Biria, R. (2017). Exploring Interactive and Interactional Meta-discourse Markers in Discussion Sections of Social and Medical Science Articles, *International Journal of Research in English Education*, 2(4), 11-29 Website: www.ijreeonline.com, Email: info@ijreeonline.com.
- Ozdemir, N. O., & Longo, B. (2014). Meta-discourse use in Thesis Abstracts: a Cross-cultural Study. *Social and Behavioral Sciences*, 141, 59-63. <https://doi.org/10.1016/j.sbspro.2014.05.011>
- Paltridge, B. & Starfield, S. (2007). *Thesis and dissertation writing in the second language: A handbook for supervisors*, New York: Routledge.
- Sanjaya, I.N.S., Sitawati, A.A.R. & Suciani, N.K. (2015). 'Comparing Hedges Used by English and Indonesian Scholars Published in Research Articles: A Corpus-Based Study', *TEFLIN Journal*, 26(2), 209-227. DOI: <http://dx.doi.org/10.15639/teflinjournal.v26i2/209-227>.
- Sorahi, M. & Shabani, M. (2016). 'Meta-discourse in Persian and English Research Article Introductions', *Theory and Practice in Language Studies*, 6(6), 1175-1182, DOI: <http://dx.doi.org/10.17507/tpls.0606.06>
- Suntara, W. & Chokthawikit, S. (2018). 'Interactional Meta-discourse in Research Article Abstracts: An Analysis from Public Health Journals', *Language and Linguistics*, 36, Special Issue. <https://so04.tci-thaijo.org/index.php/joling/article/view/154294>
- Swales, J.M. & Feak, C.B. (2009). *Abstracts and the Writing of Abstracts*, Michigan: The University of Michigan.
- Swales, J.M., Irwin, F. & Feak, C.B. (2009). *Online commentary for abstracts and the writing of abstracts*, Michigan: The University of Michigan Press. <http://www.press.umich.edu/titleDetailDesc.do?id=309332>.
- Thyer, B.A. (2008). *Preparing Research Articles*, Oxford: Oxford University Press

- Vande Kopple, W.J. (1985). 'Some exploratory discourse on meta discourse. *College Composition and Communication*, 36, 82-93. <https://doi.org/10.2307/357609>
- Waseso, M.G. & Saukah, A. (2003). 'Penerbitan Jurnal Ilmiah' (Publication of Scientific Journals), Malang: Universtas Negeri Malang.
- Wang, L. & Zhang, Y. (2016). 'An Analysis of Meta-discourse in the Abstracts of English Academic Papers', *Global Journal of Human-Social Science*, 16(9), 9-15. https://globaljournals.org/GJHSS_Volume16/3-An-Analysis-of-Metadiscourse.pdf
- Wei, J. & Duan, J. (2019). 'A Comparative Study of Meta discorsal Features in English Research Article Abstracts in Hard Disciplines', *Arab Journal of Applied Linguistics*, 4(1), 1-37. <https://files.eric.ed.gov/fulltext/EJ1217060.pdf>

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