

## Restating Research Findings in Research Articles Discussion Section: A Corpus Analysis of Linguistic Cues and Lexical Bundles

Yasir Bdaiwi Jasim

[yassir.bdaiwi@alzahraa.edu.iq](mailto:yassir.bdaiwi@alzahraa.edu.iq)

English Department, College of Education,  
Al-Zahraa University for Women, Karbala, Iraq

### ABSTRACT

The discussion section is considered one of the most crucial sections of a research article (RA). It is challenging and problematic for both novice and native writers due to its argumentative nature. This section serves various functions such as restating results, interpreting the results, comparing them with the literature, and presenting claims and contributions. However, the focus of this paper is on a particular move function which is Restating Research Findings. Although this communicative move has been found to be obligatory or conventional in recent studies that investigated different disciplines, the present paper is only concerned with medical science discipline. Every communicative move serves a certain function that may be initiated by formulaic expressions, known as 'lexical bundles' (LBs) which are realised by the use of certain linguistic devices. This study explores these linguistic devices and the lexical bundles associated with move Restating Research Findings in the discussion section of medical research articles (MRAs). The analysed corpus is 50 discussions of research articles published in high impact journals. The findings showed that this move appeared in all the selected discussions. The move of Restating Research Findings was realised by the employment of reporting verbs (e.g., find, show) and first person plural pronouns (we, our). Also, the move was initiated by a number of 3-word and 4-word LBs such as *Our study shows that* and *Our results revealed that*. These findings could guide research writers in the field of medicine to produce a clearly presented discussion section.

**Keywords:** Discussion section; medical science; restating research findings; linguistic devices; lexical bundles

### INTRODUCTION

The concept of genre, which has recently been adopted in applied linguistics, particularly English for Specific Purposes (ESP), emphasizes the communicative purpose or function of a given text. A genre can be defined as a set of texts that are characterised by a specific communicative function, which produces distinctive structural patterns. Examples of academic genre are research articles, book chapters, and conference proceedings. In other words, a genre is primarily identified and distinguished by the communicative purpose(s). There are specific categories or sections within the genre that capture the intended communicative function, known as 'sub-genre.' For example, within each section of an RA genre, there is a particular communicative purpose. To illustrate, the introduction section provides introductory information about the topic, as well as present the objectives and the problem that the author(s) seeks to investigate (Swales & Feak, 2012). On the other hand, the discussion section also presents and interprets the research findings (Dujsik, 2013). The present paper is concerned with the discussion sub-genre. The discussion section is viewed as one of the most crucial parts among the sections of an RA (e.g., Basturkmen, 2012; Dujsik, 2015; Moyetta, 2016). Basturkmen (2012) has stated that the discussion section is essential in RAs,

whereby, according to Amnuai (2017), is one of the most demanding sections for researchers, especially for novice writers. Many scholars (e.g., Holmes, 1997; Swales & Feak, 1994) have stated that the discussion is challenging and problematic for both novice and native writers due to the argumentative nature of this section.

The discussion section of an RA serves several communicative functions which are also known as 'rhetorical moves' (Peacock, 2002). Moyetta (2016) asserts that the primary purpose of the discussion section is to state the results and introduce the work of others "for confirmation, comparison or contradistinction" (Swales, 2004, p. 235). In addition, Dujsik (2015) has noted that the discussion section focuses on presenting and interpreting findings. On the other hand, Basturkmen (2012) has argued that this section allows researchers to make claims on the integration of the results and state the contributions to disciplinary knowledge. Similarly, Sheldon (2013) also finds that the most substantial claims of a study would be made in this section of an RA. Additionally, the discussion section would sometimes include other rhetorical moves such as limitations, recommendations, and implications of the study. However, the current paper investigates one particular rhetorical move; that is Restating Research Findings (RRF). The reason for examining this particular move is because move RRF is considered as one of the obligatory moves in the discussion section, as it has been confirmed by a number of recent studies (e.g. Arabi, 2022; Arsyad et. al., 2020a; Lubis, 2019). Thus, research writers need to be familiar with the importance of this move function and to have sufficient linguistic devices that they can use to effectively present move RRF.

A rhetorical move is generally viewed as a function of a specific segment in a text (Ruiying & Allison, 2003). The move can be a sentence, a group of sentences or a paragraph that serves one or multiple communicative functions in a text. On the other hand, a step is a precise rhetorical mean that is employed to reveal and address the multiple functions of a move (Ruiying & Allison, 2003). Thus, a step is at a lower level than a move, which functions as an 'elaborator' of a move. A text has "linguistic features which can be identified as contributing to the total unity and giving texture" (Halliday & Hasan, 1976, pp.1-2). Taboada (2004, p. 4) named the linguistics features that contribute to the textuality of a text "texture-creating/making devices" (p. 4)". As a rhetorical move/step is treated as a text, there must be certain linguistic features that identify and form the communicative purpose of each move and step. This paper is concerned with two main linguistics features, which include linguistics devices and lexical bundles (LBs).

In this line, the current paper seeks to explore the linguistic devices and initial LBs in move RRF of RAs discussion section. The majority of past studies examined the linguistic devices and LBs associated with rhetorical moves separately (i.e., Al-Shujairi et al., 2019; Kashiha, 2019; Mizumoto, Hamatani, and Imao., 2017). Such studies have not investigated the relationship that could be found between the use of linguistic devices and the employment of LBs within the rhetorical moves. Therefore, this paper aims to fill the gap by examining both linguistic devices and lexical bundles in move RRF.

In addition, most researchers investigating the discussion section of RAs, have focused on issues, such as disciplinary differences (Holmes, 1997; Hopkins & Dudley-Evans, 1988; Peacock, 2002), as well as local and international journals differences (Amnuai & Wannaruk, 2012; Jalilifar, Hayati, & Namdari, 2012; Sayfour, 2009). Nonetheless, there are limited studies (i.e., Al-Shujairi et al., 2019; Jalali et al., 2018) that focused on a single significant discipline, such as medicine through a specific type of journal, such as those indexed in Web of Sciences (WoS). Thus, for an in-depth analysis and more specific findings, the paper seeks to examine the rhetorical move of

RRF in the discussion section of medical RAs published in high impact journals. Accordingly, this research aims to answer the following questions:

- 1- To what extent does move Restating Research Findings occur in the discussion section of medical research articles?
- 2- Where is move RRF frequently positioned in the discussion section of MRAs?
- 3- What are the linguistic devices used to realize move RRF in the discussion section of MRAs?
- 4- What lexical bundles are employed to initiate the sentences that carry move RRF?

### SIGNIFICANCE OF THE STUDY

The results of the present paper can be incorporated in ESP courses of not only medical science but other fields of science. In this regard, the findings can assist postgraduates and novice writers produce a more organized and clearly written discussion section that can be fully understood by readers and serve the communicative purpose of the research article. To do so, having the knowledge of the different communicative functions of a research article is insufficient. Writers also need to be aware of the linguistics devices (including lexical bundles) that are associated with every move function. Having a list of linguistic cues and lexical bundles could ease the process of discussing results among novice writers and postgraduates.

### LINGUISTIC DEVICES

Some of the essential linguistic devices that are used to realise communicative functions are: verb tense, voice, self-mention markers, modals, and academic vocabulary. They are considered as explicit lexemes (Doró, 2013; Kanoksilapatham, 2005). Initially, the present research considered the lists of linguistic features identified in previous studies (Alamri, 2017; Doró, 2013; Kanoksilapatham, 2005; Nwogu, 1997; Pho, 2008; Vassileva, 2001). The current study adopted a list of linguistic cues and it includes the following: grammatical subjects, verb tenses, voice, reporting verbs, and other explicit academic lexemes. These linguistic cues were simultaneously analyzed in several previous studies (e.g., Al-Shujairi & Al-Manaseer, 2022, Amnuai, 2019; Nguyen, 2018; Pho, 2008; Suntara, 2018; Tovar-Viera, 2019).

The study conducted by Pho (2008) was a crucial investigation to examine the linguistic devices in the rhetorical moves of abstract section of RAs from the field of applied linguistics and educational technology. Pho (2008) found that the move on Situating the Research, which occurred 20 times from a total of 23, began with other references (citation), whereby research writers in the field of applied linguistics and educational technology would refer to its literature as a way of leading into the study. The move on Presenting the Research was found to be characterized by the grammatical subject (a reference to the writer's work), which would be noun phrases; *this article* and *this study*. The move on Describing the Methodology was described by the objects of the research, such as *participants* and *tools*. Moreover, simple past tense was dominantly used to describe this move. The move on Summarizing the Findings was signaled by words denoting epistemic stance, such as *possible*, *likely* and *need*, as well as attitudinal stance, such as *successful* and *better*. The move on Discussing the Research was characterized with the use of hedges, such as modals (*may*, *might*, *could*) and self-mention devices (*I* or *we*), accompanied by the employment of the reporting verb *suggest*.

More specifically, Joseph and Lim (2018) explored the linguistic devices of move Background Information in the discussion section of RAs related to forestry. They found that the move was signaled by the employment of purpose related lexemes, such as *goal* and *objective*, and procedural verbs, such as *examine* and *investigate*. Similar findings were revealed in a study conducted by Al-Shujairi and Al-Manaseer (2022) who investigated this move in MRAs.

In most cases, a rhetorical move can be observed by more than one linguistic cue (Amnuai, 2019). For example, Al-Shujairi and Al-Manaseer (2022) stated that research writers do not only need to use procedural verbs, such as *seek* and *examine* to give background information, but also use implicit and explicit reference to their own work, such as *the present research* and *this paper*. Therefore, the incorporation of two or more linguistic features would be needed to recognise the function of a specific move or step (Nwogu, 1997). The combination of these devices with other linguistic elements (i.e., prepositions, definite/indefinite articles, determiners) would form a lexical bundle, which is another focus of the present research. The difference between the linguistic devices and LBs is that a bundle would be a chunk of multiple words (i.e., linguistic devices) that frequently occurred in a register. Hence, the analysis of the linguistic features of every sentence in the corpus would help the researcher tag the RRF move, simplify the process of identifying LBs and examine the association of these LBs with move RRF.

## LEXICAL BUNDLES

According to Qin (2014), one characteristic of academic writing is the frequent use of formulaic language, which is an essential linguistic aspect that can contribute to text cohesion and function. Formulaic language has also been referred to as a recurrent or fixed-word combination, multiword lexical chunks, as well as formulaic sequences. The present research focuses on one form of formulaic language, which is the lexical bundles that writers frequently use to express ideas. There is a strong relationship between lexical bundles and rhetorical moves. The relationship was explained by Mizumoto et al. (2017) who applied the Bundle–Move Connection Approach. In this approach, the relationship between rhetorical moves and lexical bundles is viewed as building blocks that are used in the construction of discourse. Hyland (2008b) maintains that bundles have been increasingly considered as "important building blocks of coherent discourse and characteristic features of language use in particular settings" (p. 8). For instance, bundles such as *this study investigated the* and *this study examined the* were associated with the move Background Information function (Mizumoto et al., 2017). In another example, bundles such as *can be concluded that* and *it can be summarized* are typical in move on Summarizing the Study (Kashiha, 2019). That being said, every rhetorical move in the discussion section of an RA could be initiated and distinguished by the LBs, which are typically used at every move/step in writing. LBs also play an essential role in research article writing through the use of the multi-word expressions, which assisted research writers in developing argument, explanation, and description. Despite the considerable number of studies that identified LBs in RAs (e.g. Jalali & Moini, 2014; Johnston, 2017; Mbodj-Diop, 2016), very few attempts were made on the formulaic language used in constructing rhetorical moves. Several of these studies that primarily aimed to identify the rhetorical move-step structure of RAs had identified the signaling expressions and the linguistic features, such as cohesive devices and metadiscourse that seemed typical of certain moves (e.g., Cortes, 2013; Hong, 2019; Kashiha, 2015).

Cortes (2013) has examined LBs in the rhetorical moves of the introduction section, while Kashiha (2015) has investigated LBs in the rhetorical moves of the conclusion section. Cortes

asserts that a group of LBs is exclusively linked to a writing move or a step in the move and a second group occurs across several moves and steps. For example, bundles such as *in the field of*, *in the absence/presence of*, and *to the use of* were found to be linked to move 1 step 3 on Establishing a Territory. On the other hand, Kashiha (2015) believes that although a group of LBs does belong to only one move or a step of the move, a number of bundles are not found in any of these writing moves or steps. Examples of LBs that were not found to be associated with any move or step in the conclusion section are *the fact that the* and *in terms of the*. Such bundles are typically used in the conclusion section for specific functions, such as organising the language in the RA or giving a reference.

In a recent study, Mizumoto et al. (2017) have applied the Bundle-Move Connection Approach to examine moves and LBs in different sections of RAs within the field of applied linguistics. A web-based support tool for research article writing has been developed to help writers select appropriate LBs for each rhetorical move in writing a research article. However, the study has some shortcomings as the findings are based only on a corpus of applied linguistics RAs. Also, the study has focused only on examining 4-word LBs, whereby shorter or larger strings have been ignored. Moreover, as the study has analysed all sections of RAs, a number of shared bundles that can be employed in more than one move within different sections have also been included in the investigation. Thus, to the knowledge of this present study, the current literature lacks studies that examine the rhetorical moves and various forms of LBs in the discussion section of RAs, more specifically in move RRF within the field of medicine.

In a more specific study, Kashiha (2019) examined the employment of LBs in the moves and the steps on the conclusion section of 200 RAs written by native and non-native Iranian writers. The study had focused on four-word bundles, because they are more common than 5-word bundles (Hyland, 2008b), and found that native writers relied more on the use of LBs in writing conclusions. This finding was similar to Shi's (2014) discovery that showed the international corpora employed more LBs than Chinese corpora. Structurally, the study by Kashiha (2019) also found that most used bundles in the two corpora were nouns or prepositional phrases. Unlike the L2 corpus, a group of LBs was found to belong to only one move or step of a move in the native corpus. For example, bundles such as *can be concluded that* and *results of the study* are typical in move on Summarizing the Study.

In the field of medical science, Abdollahpour and Gholami (2019) had examined the relationship between the rhetorical moves and the LBs from a corpus of 1500 abstracts of MRAs. The rhetorical structure and the 4-word strings were analysed manually and were found to be connected, specifically between moves and technical LBs. For example, the bundle *purpose of this study* was found to be associated with the step on Indicating Main Purpose, which acted as triggers or complements. The triggers initiate the sentences, while the complements are embedded, or they end the sentences that carry the function of the moves. It is important to note that creating lists of lexical bundles that are typical to certain rhetorical moves of RA sections can be of importance to novice writers and postgraduates. Such list can be applied by research writers during the process of writing their research in order to systematically realize the various communicative functions of an RA.

Al-Shujairi and Al-Manaseer (2022) investigated the employment of LBs in move Background information. Their findings revealed a strong connection between the function of the move and the LBs that initiate it. For example, bundles such as *our study is based on* and *our research examined the* were employed at the beginning of the sentence that carry the function of giving background information. In line of these research findings, the current paper seeks to

examine the linguistic devices and LBs in different move of RAs discussion, that is move Reseating Research Findings.

## THE CORPUS

The corpus is 50 (54,901 words) discussions of published high impact factor RAs in the field of medicine. The field of medicine has unique importance among other fields of science and this can be noticed from the IF of the journals that published RAs. According to the journal citation report (JCR), the average IF of the top 10 journals in the broad field of medicine is 27.881 compared to the top 10 journals in other fields, such as arts and humanities, which is 6.464 only. Another view that contribute to the uniqueness of this field is that it is related to human physical health. Regarding this view, published research in this area is not only read by professionals in this field or other fields of science, but also by laypeople. This has been confirmed by past studies (e.g., Diaz et al., 2002; Patel & Johnson, 2018) who showed that more patients go online to get medical information. Writing a comprehensible and well-organised article in this discipline is therefore not only important for academicians, but also for laypeople who are seeking help through reading MRAs.

The journals were selected according to the three main criteria set by Nwogu (1997). The three criteria are representative, reputed (impact factor) and accessible. These journals were used to construct the corpus of previous studies that investigated the same discipline (e.g. Huang, 2014; Li & Ge, 2009). Regarding representativity, the term representative means “the extent to which a sample includes the full range of variability in a population” (Biber et al., 2007, p. 243). The scope of the selected journals was not limited to a specific sub-discipline. Instead, it covers a wide range of medical sub-disciplines. This criterion mirrored the criterion adopted by Wang et al. (2008) and Jalali et al. (2014), and therefore in this study, all areas of medical sciences were included. Concerning reputation, the five chosen journals (Table 1) were all reputable journals in the field of medicine. The consideration of the journals’ IFs was considered as a significant criterion in the process of building the corpus. Hence, the selected journals are high impact factor that are indexed in ISI (WoS). In specific, they are among the top 10 ranked open-accessed journals in the field of medicine.

TABLE 1. High Impact Factor Journals in the Field of Medicine

No.	Journal Name	Impact Factor	No. of RAs	Publishing Country
1	<i>New England Journal of Medicine</i>	79.260	10	United States
2	<i>The Lancet</i>	53.254	10	United Kingdom
3	<i>The Journal of the American Medical Association</i>	47.661	10	United States
4	<i>British Medical Journal</i>	23.562	10	United Kingdom
5	<i>Journal of Clinical Investigation</i>	13.251	10	United States

For up-to-date evaluation, the same journals were recommended by a head of the department, who is a professor in the field of medicine at the Faculty of Medicine, Universiti Malaya. As for the last criterion, namely accessibility, the selected five journals are all open-accessed journals, and the RAs published in these journals can be accessed and downloaded online in the form of PDF files.

Only 10 RAs were selected from each journal after applying some inclusion and exclusion criteria. The following criteria were considered in several previous studies (i.e., Amnuai, 2019; Arsyad, 2020b; Nguyen, 2018).

- 1- The selected RAs were empirical studies drawn from under the categories of “articles”, “research articles”, “original articles”, “original contributions” or “papers” in the issues of the chosen journals.
- 2- Only RAs with a high citation were selected. This was done by referring to the most cited RAs, which can be seen in the homepage of the journal website. Although a high citation does not reflect the quality of the language used in the article, it reveals the popularity of the research in the field which makes it more reliable.
- 3- Research articles with a merged findings and discussion section or a discussion and conclusion section were not included, as the present study focuses only on a particular move in the discussion section.
- 4- The RAs written by the same authors were not included. This is because more than one research article written by the same author may increase the chances of experiencing the use of similar language, structure, and style of writing, and that would be biased.
- 5- The “nativeness” was ignored as a selection criterion. Since these articles had already been published by respective journals, their authors were assumed proficient users of academic English conforming to the norms regardless of their first language and cultural background.

#### **WHY THE FIELD OF MEDICINE?**

The field of Medicine is to be examined in this paper for two main reasons. One is that the medicine discipline has unique importance among other fields of science. To elaborate, this field is directly related to human physical health, and thus, the value and importance of research published in this area is unique. Published experimental research findings in this area is not only read by professionals and academicians but also by laypeople. This matter has been confirmed by previous studies (e.g., Diaz et al., 2002; Patel & Johnson, 2018) who showed that more patients go online to get medical information. Therefore, writing a comprehensible, reader friendly and well-organised article in this discipline is not only important for academicians but also for people with different educational background who are seeking help through reading MRAs.

Second, as English language is viewed as an international language of medicine and research, relying on this language in both local and international medical journals has been increasing (Jirapanakorn et al., 2014). Thus, it is assumed that unawareness with the rhetorical organization of a journal may be a cause of limited publication among non-native practitioners academicians in the field of medicine. Yuan et al. (2013) uncovered the pressure that Chinese doctors face in this regard. Medical science postgraduates share the same burden as publication is a degree requirement in China (Li, 2014). According to Flowerdew and Wang (2016), editors of scientific journals and research reviewers tend to have expectations that go beyond “grammatical irregularities” (p.41). Hence, examining medical research has become the author’s priority. It is hoped that the research findings could be of use to novice medical writers, ESP instructors, and material and course developers.

### PROCEDURE OF CORPUS ANALYSIS

The analysis of the corpus was done following three stages which are move identification, exploring linguistic devices and tagging the lexical bundles.

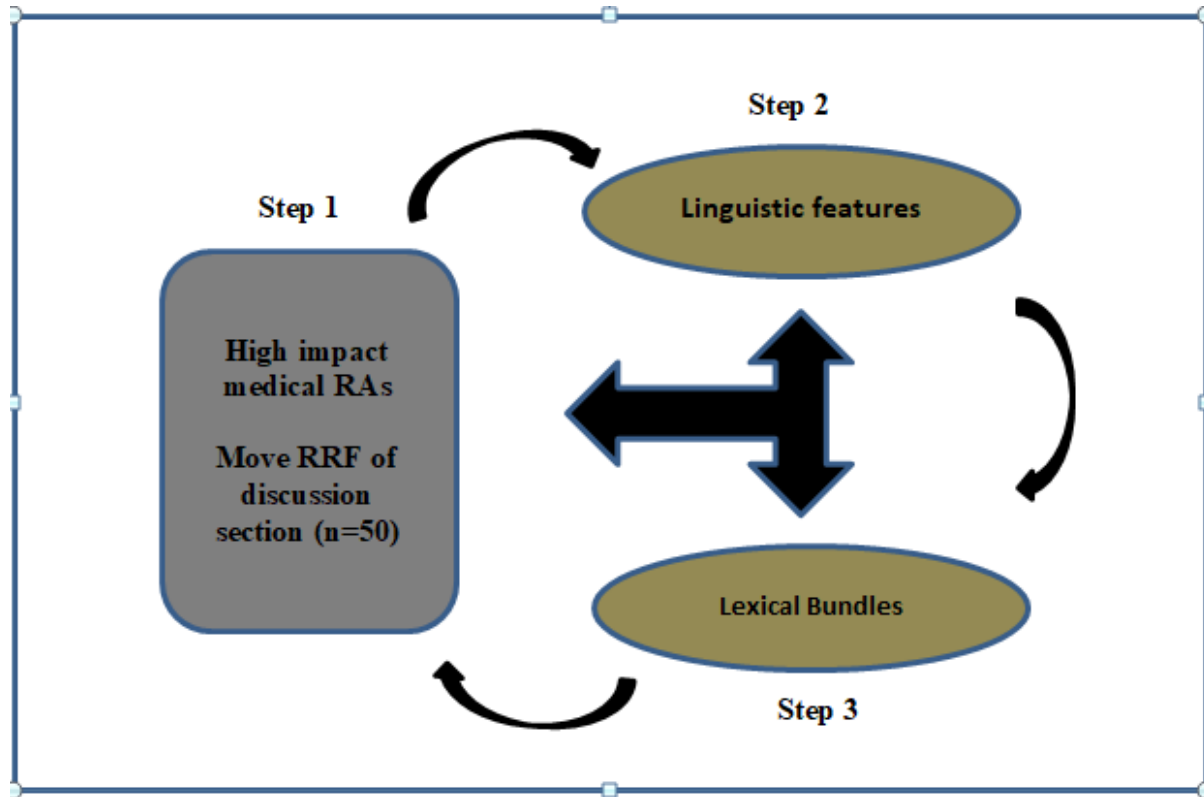


FIGURE 1. Procedure of Corpus Analysis

According to Holmes (1997), “the sentence was considered the unit of analysis implemented for examining moves, and the identifying feature was the linguistic devices that were seen to realise the communicative functions of each move.” (p. 5). The hand-coding strategy, a strategy that involves manual analysis by the researcher, was used despite the availability of some automated tools for conducting the linguistic analysis. This strategy was also done by recent studies (e.g., Ansarifar et al., 2018; Lubis, 2019) as it generated more fine-grained results. Therefore, the analysis was done manually by examining the sentences of the discussion section.

Move Restating Research Findings was identified based on a bottom-up approach. In this approach, move identification relies heavily on the use of linguistic features. Lieungnapar and Todd (2011) stated that bottom-up approach can be demonstrated through the conventional linguistic features. For example, in their study, Al-Shujairi and Al-Manaseer (2022) recognised move Background Information by the use of explicit lexemes, such as procedural verbs (e.g., examine, investigate) and first person plural pronouns. Bottom-up approach was applied in the present study for three reasons. First, the incorporation of top-down and bottom-up eventually leads to “a circularity of the identification of rhetorical moves and linguistic realizations” (Pho, 2008). Second, using bottom-up approach decreases the chance of missing out some communication functions. Lieungnapar and Todd (2011) found that the identified moves from



bottom-up approach seem to be in more details. Third, the top-down approach requires the researcher's background knowledge about the content and genre. Due to the discipline investigated (Medical science), which is not the researcher's field of study, applying the bottom-up approach which relies on the linguistic devices would meet the purpose of the current research. For example, the reporting verbs such as *find*, *show* and *reveal* are used to report findings; thus, they are associated with move RRF.

After the identification of move RRF was done, its frequency and the frequent occurrences of the linguistic devices were calculated. This process helped to verify the extent to which this move and its associated linguistic cues have been employed. This study considered 60% as the cut-off rate of move essentiality (Kanoksilapatham, 2005; Pho, 2008). As a result, the move can be considered as obligatory (if it is detected in 100% of the discussion section), conventional (if it is detected in 60% to 99% of the discussion section), or optional (if it is in less than 60% of the discussion). Once the move analysis of the samples have been completed, the sentences that convey move RRF were further analysed for their use of LBs. The LBs were analysed using the AntConc3.5.7w computer program. The LBs in the texts were identified by an automated corpus tool based on three criteria: the cut-off frequency which is 40 cases per million words (Biber et al., 2004), the frequency of LBs which is in at least 5 different samples (Biber & Barbieri, 2007; Cortes, 2004), and the length of word combinations which is 3 to 5 words lexical bundles. Finally, a list of lexical bundles was created.

The procedure of identifying the LBs was by searching for the co-occurrences of the linguistic devices of the move. For example, the reporting verb *find*, which is one of the linguistic devices investigated in this study is used to realise move RRF. Therefore, it was keyed into the software to look for words that co-occur with this verb to form a bundle. Examples of LBs identified by examining this verb are *we found that*, *this study found that*, and *we found no evidence of*. Figure 2 is a screenshot showing the identification of LBs in move RRF.

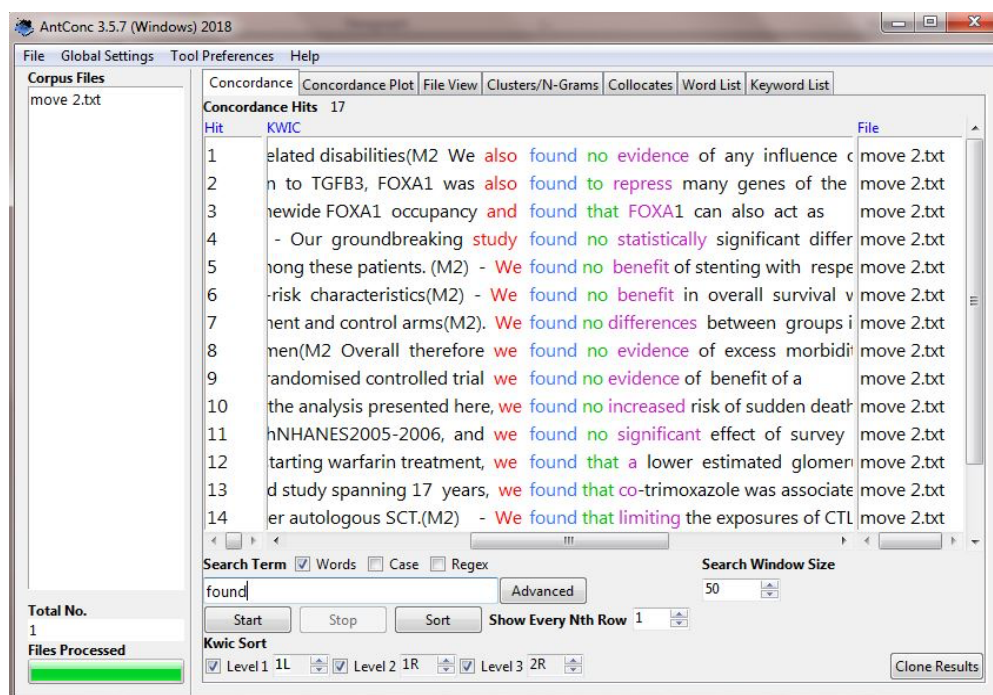


FIGURE 2. A screenshot showing the identification of LBs in move RRF

## FINDINGS AND DISCUSSION

Move Restating Research Findings (RRF) is detected in all the corpus of 50 (100%) discussions, which this study considers an obligatory move in the discussion of MRAs. This result supports the findings by Huang (2014). Also, both Arsyad et al. (2020a) and Nwogu (1997) have asserted that move RRF is an obligatory move with 100% frequency. Moreover, this move is also frequently found in other disciplines, such as applied linguistics (Liu & Buckingham, 2018), accounting (Amnuai, 2017), as well as chemistry and environmental engineering (Ebrahimi & Heng, 2018). According to Peacock (2002), restating the findings is a common move observed in the corpus of 7 disciplines within his study, which includes business and law. One possible reason for this similar finding is that research authors ought to state the results before the explanation. This reason may also suggest that this move is a crucial element in the discussion section of RAs that are not only from the field of medicine, but also from other disciplines.

### THE LOCATION OF MOVE RRF

Although the name of this move can be slightly different from one model to another (i.e., Reporting Findings, Main Findings, Statement of Results), the function of this move remains the same, which is to report the main finding of the research. According to Nwogu (1997), move RRF is short and tends to appear as the first segment of information in the discussion section of MRAs. This study has found that move Background Information is the first observable information in the first paragraph of the discussion section. There are a few cases where move RRF is noticed at the beginning of the discussion section (Example 1).

#### Discussion

In this phase III cluster randomised controlled trial *we found no evidence of* .....(M2). The intervention *did not have an impact* on..... (M3S2).

EX 1

In most cases (34); however, this move has occurred after move Background Information in the corpus of the present research, which is similar to Nwogu's (1997) corpus. This current finding suggests that research writers may provide some background information related to the research purpose or research method before restating the research findings (Example 2).

#### Discussion

*This* cluster randomised *trial examined* the.....(M1). *We found* no differences between groups in the..... (M2).

EX 2

This study has also noticed that before stating move RRF, writers of MRAs would start the discussion section by presenting the primary purpose of the study to remind the audience. The procedural verb, *examine*, is used before the overall outcome of the study is presented by clearly stating the findings. This understanding would be indicated through the employment of the reporting verb, *find*, in the simple past tense.

### THE LINGUISTIC DEVICES OF MOVE RRF

The significant function of this move could be due to the awareness among the research writers to remind the readers of the overall research findings before describing them extensively. The findings are assumed to be presented in the section on Findings before being restated in the discussion section. Thus, the core purpose of move RRF is only to restate the main research outcome. Being considered as Reporting Results, Ruiying and Allison (2003) stated that this move presents the results of the study, which includes briefly answering research questions in the form of explicit statements. Table 2 demonstrates the function of move RRF and the linguistic devices that are associated with this move.

TABLE 2. The Function and the Frequency of Linguistic Features of Move RRF

Move Restating Research Findings	
Function: Reporting the main finding of research	
Linguistic devices	<i>f</i>
1. Reporting verbs	50
Find	17
Show	16
Associate	5
Observe	3
Detect	3
Demonstrate	3
Reveal	2
Suggest	1
2. First-person plural pronoun	48
We	34
Our	14

#### REPORTING VERBS

Move RRF is realised through the employment of reporting verbs and the first-person plural pronoun, *we*. The reporting verbs have occurred 50 times, which means in all 50 of the discussions. The most frequent reporting verbs are *find* and *show*, which have been detected 17 and 16 times, respectively. The reporting verbs such as *show*, *find*, *reveal*, and *demonstrate* are also known as ‘finding verbs,’ which usually occur in statements that describe the findings (Thomas & Hawes, 1994). Besides, the first-person plural pronoun, *we*, has occurred 34 times while the possessive case, *our*, has occurred 14 times. Similar to the study by Li and Ge (2009), as well as Nwogu (1997), a variety of tenses (e.g., simple past, present simple and present perfect) are also used to signal move RRF in the discussion section of MRAs. Thus, the assumption that a particular tense is typical to this move could not be made, although a tense might be used more commonly on this move than other tenses. However, the analysis has revealed that some reporting verbs are associated with a particular tense. For example, the reporting verb, *find*, is consistently used in the past tense (Examples 3 to 6).

Ex 3: “We **found** no differences between groups in .....

Ex 4: “We also **found** no evidence of any .....

Ex 5: “We **found** no benefit of stenting with respect to .....

Ex 6: “We **found** that a sharp rise in LDH levels occurring within.....”

The use of past tense for the verb *find* in the present corpus is similar to the result from Yeganeh and Boghayeri (2015), who have noticed that the simple past is the common tense used to report findings with verbs associated with finding such as *find* and *reveal*. On the other hand, another verb on finding, *show*, is mostly employed in present simple tense by medical research writers to report the main finding of the research (Examples 7 -to 9). Findings of certain verbs that are used with specific tenses are unique to this research, which have yet to be reported in past studies (e.g., Amnuai, 2017; Liu & Buckingham, 2018; Moyetta, 2016). The subject of the verb, *show*, is observed to be the self-reference of the writer on the work (*our study, our analysis*), while the subject of the verb *find* is of the writers mentioning themselves (*we*). This observation suggests that the research writers of the selected MRAs tend to employ the past tense when referring to themselves by the use of first person subject pronoun *we*. On the other hand, research writers employ the present tense when referring to their work with the use of first person possessive adjective *our*. However, the trend of using a specific tense on a particular verb related to reporting may need further investigation.

Ex 7: “Our analysis **shows** a trend toward .....

Ex 8: “Our study **shows** that the combination of .....

Ex 9: “Our study shows a potent immunological aspect of .....

#### FIRST-PERSON PLURAL PRONOUN

Another linguistic device that is recurrently employed by the medical research writers for this move is the pronoun, *we* that is used with procedural verbs to achieve move Background Information, The pronoun *we* co-occurred with verbs related to findings in order to achieve move RRF (Examples 10&11). The frequent use of this pronoun can be attributed to the interest among the medical research writers to show their voice and claim ownership to research findings explicitly. According to Li and Ge (2009), the highest frequency of the pronoun, *we*, is in the discussion section of MRAs. The employment of the pronoun, *we*, emphasises the importance and the uniqueness of the work by researchers to earn credibility for their work (Dobakhti, 2011) and promote themselves (Hyland, 2001). Nonetheless, this pronoun refers not only to the research writers but also to both the authors and the audience within the specific discipline (Harwood, 2005). Therefore, the use of *we* in research writing can be exclusive in some occasions and inclusive on other occasions based on the context.

Ex 10: “**We found** no benefit in overall survival with .....

Ex 11: “**We detected** no significant difference .....

The present study has only found a few occurrences (16) for the possessive pronoun, *our*, in move RRF. On the contrary, the pronoun *our* has been reported to be more frequent than *we* in the discussion section of RAs within the field of applied linguistics (Dobakhti, 2011). These contradictory findings could be due to the disciplinary variation, whereby writers in social sciences tend to hide behind the data of the study by using phrases, such as *our data* and *our analysis*, instead of the pronoun, *we* (Hyland, 2001). On the other hand, medical writers tend to explicitly show their voice and claim ownership to their contribution by using the pronoun, *we*. In the present research, the pronoun, *our*, is mostly collocated with *results, randomised trial, study, and analysis* (Examples 12 to 14).

Ex 12: “**Our data** demonstrate that *Prog-Tg* mice phenocopy many aspects.....”

Ex 13: “**Our randomised trial** of nearly 200 participants shows that .....

Ex 14: “**Our results** revealed that .....

There were two cases where the writers used *this trial*, and *this study* to refer to their work (Examples 15&16). Research writers of any discipline can use the former, with the latter being more related to experimental research. This description is reasonable to the findings of this study, as the selected corpus involves empirical MRAs.

Ex 15: “**This study** shows that .....

Ex 16: “**This trial** has shown for the first time.....”

### LEXICAL BUNDLES ASSOCIATED WITH MOVE RRF

In this move, the most dominant LBs are found to be 3-word and 4-word bundles. 5-word bundles are, however, not found in this move. The most frequent 3-word bundles are *we found no* (7), *we found that* (6), and *the rate of* (4). On the other hand, the most frequent 4-word bundle is *our study shows that*, which has occurred 3 times in the corpus, while the rest has only occurred twice. Table 3 demonstrates the frequency of the LBs that are found in move RRF.

TABLE 3. List of LBs in Move RRF

3-word LBs	f	4-word LBs	f	5-word LBs	f
<b>We found no</b>	7	Our study shows that	3	–	
<b>We found that</b>	6	This study shows that	2		
<b>The rate of</b>	4	Our results revealed that	2		
<b>We showed that</b>	3	Overall increase in the	2		
<b>associated with a</b>	3	A major finding was	2		
<b>we revealed that</b>	2	Our findings show that	2		
		Our trail shows that	2		

Based on the list of 4-word LBs, five bundles are associated with move RRF in the discussion section of MRAs. These 4-word bundles act as triggers in initiating the sentences that carry the communicative function of move RRF (Example 15&16). There is a strong relationship between the meaning of the bundles, which is reflected by the reporting verbs (e.g., *show*, *reveal*) and the function of move RRF in stating the main research results. This finding on the 4-word bundles in the present research is, however, in contrast with Jalali et al. (2014) who have also examined LBs in a medical corpus. This contradicting finding may be due to the different sections that have been examined by both studies. Jalali et al. (2014) have analysed the introduction section, whereby reporting research findings is not a function within that section. Therefore, results from the study would not include bundles, such as *This study shows that* and *our results revealed that*.

The finding on 3-word LBs is similar to Jalali and Moini (2014), Mbodj-Diop (2016) and Salazar (2011), which have analysed corpus within the field of medicine and biochemistry. However, LBs such as *the rate of* and *we found that* are assumed to occur in any RA regardless of the discipline. This assumption is further proven by Biber et al. (2004), who have stated that the bundles *we found that* and *our results suggest* are commonly employed in the results and discussion sections of RAs. Examples of 3-word and 4-word LBs that are associated with move RRF are illustrated below (Examples 17 to 19).

- Ex 17: “*We found no differences between groups in quality of life, .....*”  
Ex 18: “*Our study shows that the combination of an anti-.....*”  
Ex 19: “*A major finding was the underrecognition of ARDS by .....*”

## CONCLUSION

The current research sought to explore the linguistic devices and initial lexical bundles associated with move Restating Research Findings in the discussion section of MRAs. The findings showed that move RRF occurred in 100% of the corpus, thus, it is considered an obligatory move in the discussion of MRAs. Also, this move was found to be located after move Background Information. However, move RRF started the discussion section when move Background Information is not tagged. Regarding the linguistic devices, reporting verbs such as *show* and *find* and first-person plural pronouns *we* and *our* were employed to realize the function of move RRF. Furthermore, a list of 3-word and 4- word LBs were found to initiate the sentences that convey the function of move RRF. The identified LBs are composed of the found linguistic devices. Therefore, it can be concluded that there is a strong connection between the linguistic devices and the LBs associated with move RRF in the discussion of MRAs.

The analyses of linguistics features and lexical bundles in move RRF suggested various pedagogical implications for the teaching of English for Academic Purposes (EAP) to assist students, especially graduate students, novice writers, and non-native English writers in academic writing. The investigation of move RRF and the linguistic features that are associated with can be beneficial for international graduate students in many aspects. It may provide insights of how English RAs published in high impact journals were written and structured to provide awareness of the international norms and practices in medical science, regardless of the authors’ nationality. In addition, the list of lexical bundles identified in the present study would benefit ESP or EAP practitioners and course designers to develop a more effective syllabus that meets students’ need. The identified list of LBs would help postgraduates and novice writers in the field of medicine to write effective, well-structured, and well-written discussions of research findings. Rather than being confused about which expression or phrase to use in realising a specific function in the discussion, medical research authors can now refer to the list of lexical bundles when structuring the discussion moves, particularly move function RRF and contribute to the readability of the research.

There are two main limitations in the present research. First, the researcher investigated only one particular move of the discussion section; that is move RRF. Further studies may examine other obligatory moves, such as Interpreting Research Outcome and Comparing and Contrasting Findings with Literature. Second, the present paper focused on only medical science RAs. Comparing the findings from two distinct disciplines might reveal some interesting differences and similarities. Future studies could consider researching disciplinary variations with regards to the use of linguistic devices and LBs.

## REFERENCES

- Abdollahpour, Z., & Gholami, J. (2019). Embodiment of Rhetorical Moves in Lexical Bundles in Abstracts of the Medical Sciences. *Southern African Linguistics and Applied Language Studies*, 37, 339-360.
- Alamri, B. M. (2017). *Connecting Genre-Based and Corpus-Driven Approaches in Research Articles: A Comparative Study of Moves and Lexical Bundles in Saudi and International Journals*. Doctoral Dissertation, University of New Mexico. [http://digitalrepository.unm.edu/educells\\_etds/81](http://digitalrepository.unm.edu/educells_etds/81)
- Al-Shujairi, Y. B. J., & Al-Manaseer, F. A. J. (2022). Backgrounding the Discussion Section of Medical Research Articles. *Open Journal of Modern Linguistics*, 12(1), 71-88.
- Al-Shujairi, Y. B. J., Tan, H., Abdullah, A. N., Nimehchisalem, V., & Imm, L. G. (2019). Moving in the Right Direction in the Discussion Section of Research Articles. *Journal of Language and Communication (JLC)*, 6, 459-473.
- Amnuai, W. (2017). The Textual Organization of the Discussion Sections of Accounting Research Articles. *Kasetsart Journal of Social Sciences*, 40, 389-394. <https://doi.org/10.1016/j.kjss.2017.10.007>
- Amnuai, W. (2019). Analyses of Rhetorical Moves and Linguistic Realizations in Accounting Research Article Abstracts Published in International and Thai-Based Journals. *SAGE Open*, 9, 1-9. <https://doi.org/10.1177/2158244018822384>
- Amnuai, W., & Wannaruk, A. (2012). Investigating Move Structure of English Applied Linguistics Research Article Discussions Published in International and Thai Journals. *English Language Teaching*, 6, 1-13.
- Ansarifar, A., Shahriari, H., & Pishghadam, R. (2018). Phrasal complexity in academic writing: A comparison of abstracts written by graduate students and expert writers in applied linguistics. *Journal of English for Academic Purposes*, 31, 58-71.
- Arabi, H. A. (2022). Move analysis of the discussion section in Arabic and English Research Articles. *ESP Across Cultures*, 9.9-25
- Arsyad, S., Purwo, B. K., & Adnan, Z. (2020a). The Argument Style in Research Article Discussions to Support Research Findings in Language Studies. *Studies in English Language and Education*, 7, 290-307. <https://doi.org/10.24815/siele.v7i2.16626>
- Arsyad, S., Zaim, M., Ramadhan, S., & Lubis, A. A. (2020b). The Argument Style of Research Article Discussions by Non-Native Authors of English Published in International Journals. *Journal of Applied Linguistics & Literature (JOALL)*, 5, 193-212.
- Basturkmen, H. (2012). A Genre-Based Investigation of Discussion Sections of Research Articles in Dentistry and Disciplinary Variation. *Journal of English for Academic Purposes*, 11, 134-144. <https://doi.org/10.1016/j.jeap.2011.10.004>
- Biber, D., Connor, U., & Upton, T. A. (2007). *Discourse on the move: Using corpus analysis to describe discourse structure*. Amsterdam, The Netherlands: John Benjamins Publishing Company.
- Biber, D., Conrad, S., & Cortes, V. (2004). If You Look at ...: Lexical Bundles in University Teaching and Textbooks. *Applied Linguistics*, 25, 371-405. <https://doi.org/10.1093/applin/25.3.371>
- Cortes, V. (2013). The Purpose of This Study Is to: Connecting Lexical Bundles and Moves in Research Article Introductions. *Journal of English for Academic Purposes*, 12, 33-43. <https://doi.org/10.1016/j.jeap.2012.11.002>

- Diaz, J. A., Griffith, R. A., Ng, J. J., Reinert, S. E., Friedmann, P. D., & Moulton, A. W. (2002). Patients' use of the internet for medical information. *Journal of General Internal Medicine*, 17(3), 180–185. <https://doi.org/10.1046/j.1525-1497.2002.10603.x>
- Dobakhti, L. (2011). *The Discussion Section of Research Articles in Applied Linguistics: Generic Structure and Stance Features* (Unpublished doctoral dissertation, Universiti Malaya, Kuala Lumpur, Malaysia).
- Doró, K. (2013). Selling Their Research: The Linguistic Realization of Rhetoric Moves in English Thesis Abstracts Written by Hungarian Undergraduates. *Romanian Journal of English Studies*, 10, 181-191. <https://doi.org/10.2478/rjes-2013-0016>
- Dujsik, D. (2013). A genre analysis of research article discussions in applied linguistics. *Language Research* 49(2), 453-477.
- Dujsik, D. (2015). A Genre Analysis of Research Article Discussions in Applied Linguistics. *Language Research* 49, 453-477.
- Flowerdew, J., & Wang, S. H. (2016). Author's editor revisions to manuscripts published in international journals. *Journal of Second Language Writing*, 32, 39-52
- Halliday, M. A., & Hasan, R. (1976). *Cohesion in English*. Longman, London.
- Ebrahimi, S. F., & Heng, C. S. (2018). Grammatical subject in results and discussion section of research articles: Disciplinary variations. *Journal of Teaching Language Skills*, 37(1), 97-125.
- Harwood, N. (2005). 'We do not seem to have a theory ... The theory I present here attempts to fill this gap': inclusive and exclusive pronouns in academic writing. *Applied Linguistics*, 26(3), 343–375. <https://doi.org/10.1093/applin/ami012>
- Holmes, R. (1997). Genre Analysis, and the Social Sciences: An Investigation of the Structure of Research Article Discussion Sections in Three Disciplines. *English for Specific Purposes*, 16, 321-337. [https://doi.org/10.1016/S0889-4906\(96\)00038-5](https://doi.org/10.1016/S0889-4906(96)00038-5)
- Hopkins, A., & Dudley-Evans, T. (1988). A Genre-Based Investigation of the Discussion Sections in Articles and Dissertations. *English for Specific Purposes*, 7, 113-121. [https://doi.org/10.1016/0889-4906\(88\)90029-4](https://doi.org/10.1016/0889-4906(88)90029-4)
- Huang, D. (2014). Genre Analysis of Moves in Medical Research Articles. *Stylus*, 5, 7-17.
- Hyland, K. (2005). Stance and Engagement: A Model of Interaction in Academic Discourse. *Discourse Studies*, 7, 173-192. <https://doi.org/10.1177/1461445605050365>
- Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for specific purposes*, 20(3), 207-226.
- Hyland, K. (2008). As Can Be Seen: Lexical Bundles and Disciplinary Variation. *English for Specific Purposes*, 27, 4-21. <https://doi.org/10.1016/j.esp.2007.06.001>
- Hyland, K. (2011). Looking through Corpora into Writing Practices. In V. Viana, S. Zyn-gier, & G. Barnbrook (Eds.), *Perspectives on Corpus Linguistics* (pp. 99-114). Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/scl.48.07hyl>
- Jalali, Z. S., & Moini, M. R. (2018). A Corpus-Based Study of Lexical Bundles in Discussion Section of Medical Research Articles. *Iranian Journal of Applied Language Studies*, 10, 95-124.
- Jalali, Z. S., Moini, M. R., & Arani, M. A. (2014). Structural and Functional Analysis of Lexical Bundles in Medical Research Articles: A Corpus-Based Study. *International Journal of Information Science and Management (IJISM)*, 13, 51-69.
- Jalilifar, A., Hayati, A., & Namdari, N. (2012). A Comparative Study of Research Article Discussion Sections of Local and International Applied Linguistic Journals. *The Journal of Asia TEFL*, 9, 1-29.



- Jin, B. (2018). Rhetorical Differences in Research Article Discussion Sections of High-and Low-Impact Articles in the Field of Chemical Engineering. *IEEE Transactions on Professional Communication*, 61, 65-76. <https://doi.org/10.1109/TPC.2017.2747358>
- Jirapanakorn, N., Trakulkasemsuk, W., & Keyuravong, S. (2014). A Move Analysis of English Research Article Introductions in Thai and International Medical Journals. *rEFLECTIONS*, 17, 23-40.
- Johnston, K. M. (2017). *Lexical bundles in applied linguistics and literature writing: A comparison of intermediate English learners and professionals* (Dissertations and Theses. Paper 3482, Portland State University, Oregon, USA). Retrieved from [https://pdxscholar.library.pdx.edu/open\\_access\\_etds/3482/](https://pdxscholar.library.pdx.edu/open_access_etds/3482/)
- Joseph, R., & Lim, J. M. H. (2018). Background Information in the Discussion Sections of Forestry Journals: A Case Study. *GEMA Online® Journal of Language Studies*, 18, 198-216.
- 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>
- Kashiha, H. (2015). Recurrent formulas and moves in writing research article conclusions among native and nonnative writers. *3L: The Southeast Asian Journal of English Language Studies*, 21(1), 47-59. <https://doi.org/10.17576/3L-2015-2101-05>
- Kashiha, H. (2019). An awareness of formulaic clusters in conclusion moves of Applied Linguistics research articles. *Journal of new advances in English Language Teaching and Applied Linguistics*, 1(1), 1-18.
- Li, Y. (2014). Chinese medical doctors negotiating the pressure of the publication requirement. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE)*, (28), 107-128.
- Li, L. J., & Ge, G. C. (2009). Genre Analysis: Structural and Linguistic Evolution of the English-Medium Medical Research Article (1985-2004). *English for Specific Purposes*, 28, 93-104. <https://doi.org/10.1016/j.esp.2008.12.004>
- Li, L., Franken, M., & Wu, S. (2020). Bundle-Driven Move Analysis: Sentence Initial lexical Bundles in PhD Abstracts. *English for Specific Purposes*, 60, 85-97. <https://doi.org/10.1016/j.esp.2020.04.006>
- Lieungnapar, A., & Todd, R. W. (2011, April). *Top-down versus bottom-up approaches toward move analysis in ESP*. Paper presented at International Conference on Doing Research in Applied Linguistics (pp. 1-10), King Mongkut's University of Technology Thonburi, Bangkok, Thailand. Retrieved from <https://www.semanticscholar.org/paper/>
- Liu, Y., & Buckingham, L. (2018). The Schematic Structure of Discussion Sections in Applied Linguistics and the Distribution of Metadiscourse Markers. *Journal of English for Academic Purposes*, 34, 97-109. <https://doi.org/10.1016/j.jeap.2018.04.002>
- Lubis, A. H. (2019). The argumentation structure of research article 'findings and discussion' sections written by non-native English speaker novice writers: a case of Indonesian undergraduate students. *Asian Englishes*, 22(2), 143-162. <https://doi.org/10.1080/13488678.2019.1669300>
- Mbodj-Diop, N. B. (2016). *Lexical Bundles in Medical Research Articles: Structures and Functions*. Doctoral Dissertation, Michigan State University. <http://libguides.lib.msu.edu/az.php>
- Mizumoto, A., Hamatani, S., & Imao, Y. (2017). Applying the bundle-move connection approach to the development of an online writing support tool for research articles: Using bundle-

- move connection for tool development. *Language Learning*, 67(4), 885–921. <https://doi.org/10.1111/lang.12250>
- Moyetta, D. (2016). The Discussion Section of English and Spanish Research Articles in Psychology: A Contrastive Study. *ESP Today-Journal of English for Specific Purposes at Tertiary Level*, 4, 87-106.
- Nguyen, T. T. L. (2018). Rhetorical structures and linguistic features of English abstracts in Thai Rajabhat university journals. *3L: Southeast Asian Journal of English Language Studies*, 24(4), 71-84. <https://doi.org/10.17576/3L-2018-2404-06>
- Nwogu, K. N. (1997). The Medical Research Paper: Structure and Functions. *English for Specific Purposes*, 16, 119-138. [https://doi.org/10.1016/S0889-4906\(97\)85388-4](https://doi.org/10.1016/S0889-4906(97)85388-4)
- Patel, V., & Johnson, C. (2018). Individuals' use of online medical records and technology for health needs. *ONC Data Brief*, 40, 1-17.
- Peacock, M. (2002). Communicative Moves in the Discussion Section of Research Articles. *System*, 30, 479-497. [https://doi.org/10.1016/S0346-251X\(02\)00050-7](https://doi.org/10.1016/S0346-251X(02)00050-7)
- Pho, P. D. (2008). Research Article Abstracts in Applied Linguistics and Educational Technology: A Study of Linguistic Realizations of Rhetorical Structure and Authorial Stance. *Discourse Studies*, 10, 231-250. <https://doi.org/10.1177/1461445607087010>
- Qin, J. (2014). Use of formulaic bundles by non-native English graduate writers and published authors in applied linguistics. *System*, 42, 220–231.
- Ruiying, Y., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22(4), 365–385. [https://doi.org/10.1016/S0889-4906\(02\)00026-1](https://doi.org/10.1016/S0889-4906(02)00026-1)
- Sayfour, N. (2009). Iranian ISI and Non-ISI medical research articles in English: A comparative ESP/EAP move analysis. *Journal of English Language Teaching and Learning*, 1(212), 135–160.
- Sheldon, E. (2013). *The Research Article: A Rhetorical and Functional Comparison of Texts Created by Native and Non-Native English Writers and Native Spanish Writers*. Doctoral Dissertation, University of New South Wales. <http://unsworks.unsw.edu.au/>
- Suntara, W. (2018). Linguistic realisations of rhetorical structure in research articles abstracts: an analysis based on food technology journals. *Pertanika Journal of Social Sciences & Humanities*, 26(3), 1283 - 1300.
- Swales, J. M. (1990). *Genre Analysis: English in Academic and Research Settings*. Cambridge University Press.
- Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: A course for nonnative speakers of English* (3rd ed.). Ann Arbor, MI: University of Michigan Press
- Swales, J. M., & Feak, C. B. (2004). *Academic Writing for Graduate Students: Essential Tasks and Skills* (2nd ed.). The University of Michigan Press.
- Swales, J. M., & Feak, C. (1994). *Academic Writing for Graduate Students: A course for nonnative speakers of English*. Ann Arbor: University of Michigan Press.
- Taboada, M. T. (2004). *Building coherence and cohesion: Task-oriented dialogue in English and Spanish* (Vol. 129). John Benjamins Publishing.
- Thomas, S., & Hawes, T. P. (1994). Reporting Verbs in Medical Journal Articles. *English for Specific Purposes*, 13, 129-148. [https://doi.org/10.1016/0889-4906\(94\)90012-4](https://doi.org/10.1016/0889-4906(94)90012-4)
- Tovar-Viera, R. (2019). Rhetorical organization and linguistic realizations of moves in English research article abstracts. *International Congress on the Didactics of the English Language Journal*, 3, 1-23. Retrieved from <http://revistas.pucese.edu.ec/ICDEL/index>

- Vassileva, I. (2001). Commitment and Detachment in English and Bulgarian Academic Writing. *English for Specific Purposes*, 20, 83-102. [https://doi.org/10.1016/S0889-4906\(99\)00029-0](https://doi.org/10.1016/S0889-4906(99)00029-0)
- Wang, J., Liang, S. L., & Ge, G. C. (2008). Establishment of a Medical Academic Word List. *English for Specific Purposes*, 27, 442–458.
- Yuan, H. F., Xu, W. D., & Hu, H. Y. (2013). Young Chinese doctors and the pressure of publication. *The Lancet*, 381(9864), e4.

### ABOUT THE AUTHOR

Yasir Bdaiwi (Ph.D) received his Ph.D in English language from Universiti Putra Malaysia, Malaysia. He is currently a full-time lecturer at Al-Zahraa University for Women, Iraq. His research interests focus on corpus linguistics, academic writing and second language acquisition.