LLT Journal, e-ISSN 2579-9533, p-ISSN 1410-7201, Vol. 27, No. 1, April 2024, pp. 336-355



LLT Journal: A Journal on Language and Language Teaching http://e-journal.usd.ac.id/index.php/LLT Sanata Dharma University, Yogyakarta, Indonesia

# INTRODUCTION IN SOCIAL SCIENCE RESEARCH ARTICLES BY INDONESIAN AUTHORS: A COMPARATIVE MOVE ANALYSIS

Eri Kurniawan<sup>1\*</sup>, Siti Nurzihan Nabilla<sup>2</sup>, and Yalma Rifqiya Mauludini<sup>3</sup>

<sup>1,2,3</sup>Universitas Pendidikan Indonesia, Bandung, Indonesia eri\_kurniawan@upi.edu<sup>1</sup>, nabilla@upi.edu<sup>2</sup>, and yalmamaulu@gmail.com<sup>3</sup> \*correspondence: eri\_kurniawan@upi.edu https://doi.org/10.24071/llt.v27i1.8191 received 15 February 2024; accepted 18 April 2024

# Abstract

The introduction section of a research article (RA) is crucial, as it serves as the foundation for the entire research study. A well-crafted introduction can captivate readers, offering essential insights into the background and rationale for the study, while also conveying the research's quality and reliability. This study investigates how novice versus experienced social science researchers introduce their work in English research articles (RAs) published in internationally recognized Scopusindexed journals compared to those published in Indonesian national journals. We analyze the rhetorical structure and linguistic features used in these introductions. Employing Swales' (2004) Create A Research Space (CARS) model as a theoretical framework, this descriptive comparative qualitative study delves into the analysis of commonalities and differences in the execution of rhetorical moves and steps, as well as linguistic features and metadiscourse. The results reveal that both sets of data exhibited all three rhetorical moves outlined in the CARS model, namely Move 1 (Establishing a Territory), Move 2 (Establishing a Niche), and Move 3 (Presenting the Current Work). However, the findings also underscore distinctions in how these steps and metadiscourse were realized, indicating that writers in both groups employed distinct approaches when introducing their research studies. Implications to English teaching at universities and publication workshops are discussed.

Keywords: introduction, move analysis, research article, social science, Swales

# Introduction

Research articles (RAs) are the lifeblood of scholarly communication, allowing researchers to share their findings and advance knowledge across disciplines (Kanoksilapatham, 2007; Setiawati et al., 2021). For academics aiming to publish internationally, honing RA writing skills is crucial. Studies highlight that a high international publication rate not only benefits authors financially and in terms of reputation, but also elevates the standing of their institutions (Chang & Kuo, 2011; Kanoksilapatham, 2005; Lubis & Kurniawan, 2020; Suherdi et al., 2020).

International journals serve as a key platform for disseminating research and gaining recognition through wider readership and citations (Kurniawan, Lubis, et al., 2019; Kurniawan et al., 2019). Consequently, proficiency in English,



particularly writing skills, becomes paramount for authors targeting international publication (Amnuai, 2019; Gao & Pramoolsook, 2023). However, non-native English speakers often grapple with the conventions of RA writing, as each section has its own set of expectations (Kurniawan, et al., 2019).

The introduction section of an RA, being the first point of contact with readers, holds immense weight. Unsurprisingly, a poorly crafted introduction can deter readers from delving deeper (Safnil, 2013). Its quality is essential as it lays the foundation for understanding the research. Yet, non-native English writers may struggle due to limited vocabulary and an incomplete grasp of the required content (Safnil, 2013). This can lead to a loss of reader interest in subsequent sections. Notably, crafting introductions has long been recognized as a challenge, especially for non-native speakers (Flowerdew, 1999; Swales, 1990).

Genre analysis, focusing on identifying recurring discourse structures, offers a valuable approach to understanding how to write an effective RA introduction (Nabilla et al., 2021; Setiawati et al., 2021). Here, a "move" refers to a section fulfilling a specific communicative purpose (Swales, 2004). Genre analysis helps identify the organizational structure of academic writing, particularly in RA introductions, which is crucial for engaging readers (Amnuai & Wannaruk, 2013). John Swales' Create a Research Space (CARS) model, developed in 1990 through research on RA introductions, presents a framework for understanding their components (Swales, 1990). The model outlines three key moves, each with specific steps, that guide the development of an effective introduction.

Extensive research has explored various aspects of RA introductions, including the rhetorical structures used by writers from different disciplines (Briones, 2012; Gao & Pramoolsook, 2023; La-o-vorakiat & Singhasiri, 2021; Suryani et al., 2018; Xiao et al., 2022), comparisons between native and non-native English writers (Arsyad & Arono, 2016; Farnia & Barati, 2017; Gao & Pramoolsook, 2023; Safnil, 2013), and cross-linguistic analyses (Dueñas, 2010; Gao & Pramoolsook, 2023; Loi, 2010; Loi & Evans, 2010). However, these studies often analyze introductions written by experienced authors published in reputable journals. Less attention has been paid to comparing introductions written by novice and experienced researchers within the same field, particularly social sciences. While some research has addressed this gap (Nabilla et al., 2021), its scope has been limited.

Such a comparison, encompassing not only rhetorical structure but also linguistic features and metadiscourse, is crucial to understand how novice authors differ from experienced ones in their use of rhetorical strategies. This can provide valuable insights into the learning required for novice authors, who often struggle with international publication (Kanoksilapatham, 2007) to successfully navigate and adopt the conventions of introductions expected in internationally recognized publications. As Gao and Pramoolsook (2023) point out, the lack of established models for the social sciences further underscores the need for this exploration. Therefore, this study aims to contribute to the existing literature by investigating the rhetorical structure of social science RA introductions authored by Indonesian researchers.

In light of the identified research gaps, this study investigates the rhetorical structure of social science RA introductions written by Indonesian researchers. We address the following specific research questions:

- 1) Are there any differences in move-step structure in social science RA introductions by novice versus experienced Indonesian authors? If yes, what are the differences?
- 2) Are there any differences in linguistic features and metadiscourse in social science RA introductions by novice versus experienced Indonesian authors? If yes, what are the differences?

# The structure of research article introduction: Previous studies

Move analysis, a genre-based approach pioneered by Swales in the 1980s (Swales, 1990), has become a cornerstone for identifying research article structure. It is a popular research field, with scholars developing models to assess various sections like abstracts (inter alia Hyland, 2000; Kurniawan, 2023; Kurniawan, et al., 2019; Lubis et al., 2022; Lubis & Kurniawan, 2020), introduction (inter alia Kurniawan & Haerunisa, 2023; Luthfianda et al., 2021; Nabilla et al., 2021; Swales, 1990, 2004; Yasin & Qamariah, 2014), method (e.g., Cotos et al., 2017; Peacock, 2011), and results and discussion/conclusion (e.g., Ruiying & Allison, 2003; Yang & Allison, 2003).

For introductions specifically, Swales' 1990 Create a Research Space (CARS) model provided a framework for studying rhetorical moves (Swales, 1990). He revised it in 2004 to encompass broader stylistic variations across disciplines and languages (Swales, 2004). This revised model outlines three core moves, namely Move 1 (establishing a territory), Move 2 (establishing a niche), and Move 3 (presenting the present work). While Move 1 is standalone, each subsequent move includes steps for a more detailed analysis of its execution.

The introduction of the CARS model in 1990 sparked a surge in research on research article introduction moves. Studies have explored diverse perspectives, including introductions by native and non-native English speakers, cross-linguistic analyses, and interdisciplinary approaches.

First, studies on introductions by non-native English writers include research by Sheldon (2011) and Suryani et al. (2014). Sheldon (2011) analyzed eighteen research article introductions authored by Spanish writers and found that these writers utilized all three moves in Swales' revised CARS model, with Move 1 and Move 3 being more frequent than Move 2. Suryani et al. (2014) examined English introductions written by Malaysian writers and found no significant difference in the manifestation of the moves in Swales' revised CARS model.

Second, cross-language analyses conducted by Loi (2010), Soler-Monreal, Carbonell-Olivares, and Gil-Salom (2011), and Geçíklí (2013) explored introductions across different languages. Loi (2010) analyzed Chinese and English research article introductions, revealing that the frequency of Move 1 and Move 3 was higher than that of Move 2 in both corpora. Soler-Monreal et al. (2011) studied English and Spanish PhD thesis introductions, noting that some introductions in the Spanish corpus appeared to lack Move 2. Geçíklí (2013) analyzed twenty English and Turkish PhD theses, finding that Move 1 and Move 3 were the most realized moves in both corpora.

Third, studies focusing on interdisciplinary introductions in Law, Applied Linguistics, and Computer Science were conducted by Tessuto (2015), Rahman, Darus, and Amir (2017), and Suryani et al. (2018). Rahman et al. (2017) and Tessuto (2015) emphasized the obligatory status of Move 1 and Move 3,

considering Move 2 as optional. Suryani et al. (2018) discovered that in Computer Science research article introductions, Move 2 was deemed compulsory, while Move 1 and Move 3 were underutilized.

Finally, in a cross-cultural analysis, Zhang and Hu (2010) scrutinized forty research article introductions in Chinese and English published in medical journals. Their research indicated that English introductions adhered more closely to Swales' CARS model, whereas the Chinese introductions exhibited a lesser utilization of Move 2.

With respect to the research focus of the present study, studies relevant to our focus include those by a series of scholars (Qamariah & Wahyuni, 2017; Safnil, 2013; Samanhudi, 2017; Warsidi et al., 2024). These cross-language analyses compared move-step realizations in Indonesian and English RAIs. They generally found some discrepancies between introductions written by Indonesians and native English speakers. However, there is a gap in research exploring the convergence or divergence in writing styles between novice and experienced Indonesian researchers composing RAIs in English.

# Method

## **Research** design

This study investigates the rhetorical structure of English research article introductions (RAIs) written by Indonesian social science researchers, comparing introductions written by novice and experienced authors. We employed a descriptive comparative qualitative research design, analyzing the introductions through the lens of genre-based move analysis. This design aligns with the broader project exploring rhetorical moves in RAIs from various perspectives. Swales' (2004) revised Create A Research Space (CARS) model serves as the foundation for our analysis.

Figure 1. Swales' (2004, p. 230, 232) create a research space model

The extensive use of genre-based move analysis in RAI research underscores its effectiveness in examining rhetorical structure. Additionally, as highlighted by Yasin and Qamariah (2014), the adaptability of Swales' (2004) CARS model's versatility allows it to be applied across various subjects and cultures. This makes it a valuable tool for our study, enabling us to analyze the rhetorical moves employed in Indonesian social science RAIs.

# Data collection

This study utilized ten English research article introductions (RAIs) written by social science lecturers from the Faculty of Social Science Education at a public university in Indonesia. We chose this specific university because the broader research project, of which this study is a part, aims to support the university's international publication rate. The decision regarding corpus size is influenced by the linguistic features under investigation (Flowerdew, 2004). For common grammatical structures like nouns or verbs, a smaller corpus is sufficient due to their frequent occurrence (Biber, 2006). Additionally, our sample size aligns with previous studies (La-o-vorakiat & Singhasiri, 2021; Samanhudi, 2017; Yasin & Qamariah, 2014).

The RAIs are divided into two groups, namely five RAIs composed by novice writers and five RAIs by experienced writers. Novice writers refer to those whose RAIs were authored by lecturers who had successfully published English RAIs in SINTA journals but not yet in Scopus journals at the time of the study as first authors. In contrast, experienced writers were classified as lecturers who had authored at least one English RA in a Scopus-indexed journal. Notably, the journal quartile for both groups falls outside the current investigation's scope.

The data collection process commenced with a review of the university's official website and Google Scholar to identify lecturers who had published English RAs. The ISSN Portal, Scopus official website, and SINTA official website were also consulted to verify the journals' indexing. Subsequently, we selected and downloaded five RAIs from SINTA-indexed journals and five RAIs from Scopus-indexed journals. To maintain anonymity, the RAIs were coded as N1 to N5 for novice writers and E1 to E5 for experienced writers.

### Data analysis

The data analysis consisted of three main stages. First, we began by thoroughly reading and comprehending the titles, abstracts, and introductions of all ten RAIs. This initial immersion provided a broad understanding of the research topics and how they were introduced. Second, following Swales' (2004) CARS model, each introduction was then segmented into distinct ideas. These ideas were organized in a table using Microsoft Word. Each idea was subsequently labeled with its corresponding move and step from the CARS model. Finally, after move and step coding, we examined the linguistic features and metadiscourse associated with each identified idea. This analysis focused on how language was used to achieve specific rhetorical purposes within the introductions.

Swales' (1990) cut-off thresholds were used to categorize moves and steps as obligatory or optional based on their frequency of occurrence. Moves or steps appearing in more than 50% of the introductions were classified as obligatory, while those appearing in less than 50% were considered optional.

To enhance the reliability of the analysis and mitigate researcher subjectivity, data triangulation was employed. This involved two parties – the lead researchers and research assistants – independently conducting inter-coder reliability tests. These tests assessed the level of agreement (or disagreement) in analyzing and interpreting the data. Any disagreements were then re-examined by both parties until a full consensus was reached. This verification step ensured the accuracy and consistency of the analysis applied to the RA introductions.

## **Findings and Discussion**

What follows are descriptions and explications of the research findings in relation to the research questions presented in the introduction section.

#### **Research question 1: Rhetorical moves-steps**

The analysis revealed a consistent adherence to a three-move pattern in all ten introductions, regardless of the authors' experience. Table 1 details the distribution and occurrence percentages for each move and step, offering a comprehensive view of the rhetorical structure across the analyzed introductions.

| Table 1. Percentage of occurrence for moves and steps |                     |                |            |  |
|---|---------------------|----------------|------------|--|
| Move-Step Category                                    | Experienced writers | Novice writers | Status     |  |
|   | f(%) n=5            | f(%) n=5       |            |  |
| Move 1  | 100                 | 100            | obligatory |  |
| Move 2  | 100                 | 100            | obligatory |  |
| Step 1A   | 100                 | 100            | obligatory |  |
| Step 1B   | -                   | 20             | optional   |  |
| Step 2  | -                   | -              | -          |  |
| Move 3  | 100                 | 100            | obligatory |  |
| Step 1  | 60                  | 100            | obligatory |  |
| Step 2  | 40                  | 40             | optional   |  |
| Step 3  | 20                  | -              | optional   |  |
| Step 4  | -                   | 40             | optional   |  |
| Step 5  | 20                  | -              | optional   |  |
| Step 6  | -                   | -              | -          |  |
| Step 7  | -                   | -              | -          |  |

While Table 1 highlights several similarities between the two author groups, there are also noteworthy discrepancies. Both novice and experienced writers exhibited an absence of Move 3 Step 6 (counterarguments) and Move 3 Step 7 (consequences). However, variations were observed in the utilization of other steps within Move 2 and Move 3. These similarities and differences underscore the nuanced importance of each move and step within the introductions written by the two distinct author groups.

The following subsections will delve deeper into the occurrences of each move and step identified in the research article introductions. Each subsection will highlight specific signaling ideas that aided in recognizing the move and step within the introductions.

#### *Move 1 – Establishing a territory*

Move 1, as outlined in the CARS model, aims to establish the general field of research for the reader. It achieves this through a process of topic generalization, gradually narrowing down to more specific details relevant to the study. This move essentially introduces the reader to the subject matter being investigated. Additionally, Move 1 provides context by highlighting the background and significance of the study, thus establishing its value and relevance within the broader field.

Our analysis revealed a 100% occurrence rate for Move 1 in introductions written by both novice and experienced authors. This finding emphasizes the universal agreement that establishing a research territory is an obligatory element of a well-crafted research article introduction (RAI). Here are some examples:

- (1) *Learning and education are two inseparable concepts*; both concepts are complementary to each other in generating learned and educated individuals. (Scopus#1)
- (2) *Global warming has been believed to draw the world's attention* since *it affects the temperature that is influential to the environment and the weather.* (Sinta#2)

Both novice and experienced writer groups utilized Move 1 to introduce and provide background information on the research topic. This strategic use of Move 1 allows authors to offer readers a preliminary understanding of what the study investigates. By effectively highlighting the research topic, writers can establish a foundation for reader engagement and comprehension of the study's focus and context.

#### Move 2 - Establishing a niche

Move 2, as defined by the CARS model, plays a crucial role in positioning the current research within the existing body of knowledge. It achieves this by highlighting limitations or gaps identified in previous studies, thereby creating a space for new investigations. Similar to Move 1, Move 2 was present in 100% of the introductions analyzed, regardless of the authors' experience. This finding underscores its significance in crafting effective RAIs. The primary purpose of Move 2 is to acknowledge potential weaknesses or limitations in prior research. This step paves the way for the introduction of new research questions and justifies the need for the current study. Both novice and experienced writer groups utilized Step 1A (Indicating a Gap) to fulfill this objective. Here are some examples illustrating how both novice and experienced authors used Step 1A:

- (3) At UPI, types of plants in the vegetation **need further analysis** so that it is in accordance with the physical condition and functions of the environment around UPI. (Scopus#2)
- (4) This concealable identity then **provides an exciting opportunity** to understand the nuances of privacy communication management at the intersection of multiple stigmatised identities. (Sinta#1)

Excerpts (3) and (4) announced the gap of previous research by using phrases such as 'need further analysis' and 'provides an exciting opportunity'. Those phrases signaled the limitation of the previous studies related to their research article topics, leaving a space for them to conduct new research.

Aside from employing Step 1A, a novice writer also employed Step 1B (Adding to what is known) in the manifestation of Move 2. The novice writer showed his or her opinion regarding the problem that was known in existing knowledge.

(5) The overall data that has been described previously shows the low quality of human resources (Human Resources) in Lebak Regency. And, affirming that the biggest challenge for Lebak Regency is the effort to improve the quality of human resources which has been one of the obstacles in the development process of Lebak Regency. Because, the better the education obtained, the hope that the community will more easily absorb information related to development, as a means to improve the standard of living and welfare of society. (Sinta#5)

For example, the writer might have discussed their rationale for selecting a specific research location for a study on geography learning in underprivileged regions. This decision could have been based on prior research identifying the chosen location as having the lowest literacy rate. The excerpt could then elaborate on the writer's observations or insights about the literacy challenges in that location, potentially adding new information to the existing body of knowledge.

### Step 2: Presenting positive justifications

This step within Move 2 allows writers to provide further support for the claims made in Steps 1A (Indicating a Gap) or 1B (Adding to What is Known). Interestingly, while all writers from both groups utilized Step 1A, and one novice writer even employed Step 1B, none of them included Step 2 (Presenting Positive Justifications). This finding suggests that both experienced and novice writers considered highlighting the gap or contributing new knowledge sufficient to establish the niche of their research. They might not have felt the need to further persuade readers about the rationale behind their studies.

#### *Move 3 – Presenting the present work*

As the name suggests, Move 3 focuses on introducing the current research and explaining how the study was conducted. Our analysis revealed a 100% occurrence rate for Move 3 in introductions written by both novice and experienced authors. This indicates that both groups recognized the importance of providing a concise explanation of their studies for the reader. However, there were some variations in how each group executed this move.

Among the steps in Move 3, the most frequently conveyed was Step 1 (Announcing present research descriptively and/or purposively). We observed a 60% occurrence rate for experienced writers and a 100% occurrence rate for novice writers. This suggests that novice writers placed a stronger emphasis on explicitly announcing their research, while experienced writers might have incorporated this information more subtly.

- (6) *Based on the rationale above, the paper depicts an overview* of the Indonesian education landscape with a focus on its education system as well as the various challenges. (E3)
- (7) *This article seeks to explain* the views of the Indonesia women as Hallyu fans in plastic surgery decision making as the beauty experience. (N3)

The signaling phrases in the excerpts vividly showcased how writers from both data sets apprised readers of the focal points of their studies. This communication was evident through the use of verbs such as 'depicts' and 'seeks to explain' in the provided signaling phrases.

In addition to Step 1, experienced writers also incorporated Step 2 (Presenting RQs or hypotheses) with a 40% occurrence in both groups of data. Given the occurrences of this step in both datasets, it can be regarded as optional in the realization of Move 3. The following excerpts exemplify the manifestation of this step.

- (8) Based on the above reasons, education has an important role in preparing a generation that regards the earth as a moral subject and that understands that earth has the right to develop naturally. Therefore, the learning should be designed in such a way that it will implant the attitudes and the behaviors of land ethics. (E1)
- (9) Do they still perpetuate gender stereotype or have they been already minimizing and eliminating gender stereotype? (N4)

The signaling sentence in Excerpt (8) indicated the presentation of a hypothesis in E1, while the phrase in (9) signaled the existence of research questions that guided the study. These signaling elements play a crucial role in conveying the research focus and objectives to the readers.

# Step 3 (definitional clarifications)

This step involves offering clarifications for certain uncommon terms to enhance readers' comprehension of the research articles. According to the data analysis, 20% of experienced writers employed this step as one of the realizations of Move 3. In contrast, the occurrence of this step in the novice writer group is 0%, indicating that writers in this group did not deem it necessary to employ this step, presumably because there were no uncommon terms requiring clarification. The definitional clarification found in the data analysis is presented in the following excerpt.

(10) *Civicpedia is a civic education e-learning media which is devised with the integrated terms search, learning material on website, e-dictionary, video, poster, valued story, and interactive quiz to ease teachers in developing students' literacy skills.* (E5)

The writer of Excerpt (10) was elucidating the term 'Civicpedia,' which served as a learning media and constituted one of the data sources for the research. The

research focused on developing this media with the aim of enhancing students' literacy levels.

### Step 4: Summarising methods

The presentation of how the research was conducted is encapsulated in summarizing the research methods. A notable difference emerged in the study, as this step occurred solely in the novice writer group, with a 40% occurrence. Considering the occurrence of the step, the status of summarizing methods in both experienced and novice writer groups can be considered as optional. The following excerpts illustrate the manifestation of summarizing methods found in the data analysis.

- (10) The authors attempt to response these questions by collecting the life stories of two Indonesian lesbians and critically engage their experiences of personal, relational, social alienation, and acceptance of being lesbian and a citizen of an Islamic majority country where homosexuality considered as sinful and illegal. (N1)
- (11) The Symbolic interactionism theory is used to describe how agent of gender socialization forms the gender role at Aisyiyah female orphanage based on Muhammadiyah ideology. (N5)

Excerpts (11) and (12) presented the manifestation of Move 3 Step 4 in which both excerpts summarized the methods of the research. The difference between the two excerpts was that (11) revealed the data collection and data analysis process, whereas (12) revealed the framework used in analyzing the data.

#### Step 5: Announcing principal outcomes

Similar to Step 3, the results of the data analysis revealed that this move was employed only in the experienced writer group, with a 20% occurrence rate. Consequently, announcing the principal outcomes of the research was perceived as optional, given that it appeared in only one out of five introductions from the experienced writer group. Excerpt (13) illustrates the principal outcome in a research article written by an experienced author.

(12) In order to effectively integrate these components into learning, the author has developed an emancipatory learning model adapted from Juergen Habermas' critical thinking (citation). In the practical application of classroom teaching and learning, this developed model integrates the "scrutinising" component into the technical phase. Meanwhile, "analysing the impacts and causes of problems", "making interpretations of influencing factors" and "making solutions" become part of the practical-interpretative phase. Finally, the activities of "reflecting on the meaning and value for the present and future life" and "thinking for taking practical actions" become part of the emancipatory phase. (E4)

Step 6: Stating the value of the present research

Explicitly stating how the current study will contribute to a certain field of knowledge might aid in persuading readers of the relevance of the research.

However, the data analysis result found this step to be absent in both data groups with 0% occurrence, indicating this step to be an optional step in employing Move 3.

# Step 7: Outlining the structure of the paper

The data analysis revealed the absence of this step, similar to the previous step that involves stating the value of the research. Both steps were found to be absent in both corpora. The lack of these two steps might be attributed to Swales marking both Step 6 and Step 7 as "probable in some fields, but unlikely in others" (Swales, 2004, p. 232). Therefore, the data analysis, covering soft science fields such as Geography Education, Sociology Education, Communication Science, and Civic Education, showed a 0% occurrence of these steps.

In summary, the present study found that all the moves in the revised version of the Create A Research Space (Swales, 2004) model were manifested in both experienced and novice writer groups. This result indicates that all the moves were considered compulsory. Moreover, at the step level of Move 2, the data analysis of both experienced and novice writer corpora revealed the obligatory status of indicating a gap (Step 1A) in establishing a niche in their research article introductions. Additionally, the novice writer group showed a tendency to employ Step 1B, adding to what is known, which was not employed by the experienced writers. As for the step level of Move 3, all steps from Step 1 to 7 are perceived as optional in both data sets, with the majority of the writers employing Step 1: Announcing present research with an 80% occurrence. The number of occurrences of Step 1 indicates that the necessity of this step is greater than the rest of the steps, considering the occurrences of Step 2 to Step 7 are below 40%.

### **Research question 2: Linguistic features and metadiscourse**

Regarding linguistic features such as tenses, voices, and metadiscoursal units, specifically hedges and boosters, this study identified both similarities and differences in the way both groups employed these features. The linguistic features analysis revealed that the use of the present tense dominated research article introductions written by Indonesian experienced and novice writers in the soft science fields. However, the occurrence of each tense varied across the two data sets. The distribution of verb tenses in the moves of both data sets is presented in Table 2.

| Table 2. The distribution of verb tense in both corpora |                         |                        |  |
|---|-------------------------|------------------------|--|
| Move  | Experienced writers (%) | Novice writers (%)     |  |
| Move 1  | Present (72.06)         | Present (80.8)         |  |
|   | Past (4.41)             | Past (13.6)            |  |
|   | Future (4.41)           | Future (1.6)           |  |
|   | Perfect (19.12)         | Perfect (4.0)          |  |
| Move 2  | Present (88)            | <b>Present (57.14)</b> |  |
|   | Perfect (12)            | Past (35.72)           |  |
|   |                         | Future (7.14)          |  |
| Move 3  | <b>Present (87.5)</b>   | Present (88.89)        |  |
|   | Past (6.25)             | Past (11.11)           |  |
|   | Perfect (6.25)          |                        |  |

The analysis indicates that the present tense was predominant in all moves of both groups. However, differences were observed in the second most frequently employed tense in all moves of research article introductions (RAIs) by experienced and novice writers. In Moves 1 and 2, the two most used tenses in the experienced writers' group were present and perfect, while novice writers preferred present and past tenses. In Move 3, the present tense was also the most used in both groups. However, experienced writers evenly employed past and perfect tenses, whereas novice writers used only present and past tenses. The following excerpts represent the three most used tenses in realizing Move 1.

- (13) Eco-campus generally **means** campuses that **have** adequate under-standing of its environment. Terminologically, "eco" **derives** from "oikos" which **means** house, environment, and nature. (E2)
- (14) *The target was not only on teen women but all among both men and women at various age levels.* (N3)
- (15) Progress in International Reading Literacy Study (PIRLS) has reported that Indonesia ranked 45 of 48 countries in the International Results in Reading with the score of 428 and the global average score was 500 (citation). (E5)

In realizing Move 1, Excerpt (14) employed the present tense to explain the meaning behind the general topic of the research, leveraging one of the characteristics of the present tense, which is used to express general truths. In Excerpt (15), the past tense was utilized to inform the target audience about the previously discussed event that occurred in the past. In supporting the rationale of the research, the writer of Excerpt (16) used the perfect tense, as the action seemed to have happened at an unspecified time.

In general, the findings related to the first linguistic feature, i.e., tense, indicated that the majority of writers from both the experienced writers' group and the novice writers' group preferred the use of the present tense. While utilizing the three moves of Swales' (2004)) revised CARS model, the frequency of this tense in each move from both groups exceeded 57%. This suggests that the difference in writers' status did not significantly influence the use of tense in manifesting the moves.

At the sentence voice level, the result of the voice analysis revealed that active voice is the preferred voice in introductions from both groups, as the percentage of this voice exceeds 75% in both datasets. The detailed distribution of voice is depicted in Table 3.

| Table 3. The distribution of sentence voice in both corpora |                         |                    |  |  |
|---|-------------------------|--------------------|--|--|
| Move  | Experienced writers (%) | Novice writers (%) |  |  |
| Move 1  | Active (80.88)          | Active (76)        |  |  |
|   | Passive (19.12)         | Passive (24)       |  |  |
| Move 2  | Active (88)             | Active (67.86)     |  |  |
|   | Passive (12)            | Passive (32.14)    |  |  |
| Move 3  | Active (68.75)          | Active (81.48)     |  |  |
|   | Passive (31.25)         | Passive (18.52)    |  |  |

Table 3. The distribution of sentence voice in both corpora

The notable finding in the table is the substantial gap between the usage of active and passive voice in all moves. However, the gap in the usage of active and passive voices in Move 2 of novice writers' introductions, along with Move 3 of experienced writers' introductions, is not as pronounced (35.72% and 37.5%, respectively). Although the use of active voice heavily dominates in both corpora, it is worth noting that the frequency of passive voice in Move 2 of novice writers and Move 3 of experienced writers is higher than in the other moves (32.14% and 31.25%, respectively). Considering the high percentage of active voice in every move, it can be interpreted that the tendency of writers in both experienced and novice groups is to use active voice in realizing all three moves. The following excerpts demonstrate the use of active voice in every move.

- (16) As the backbone of every society, education heavily influences multiple parts of a country's politics, economy, and welfare (citation). (E3, Move 1)
- (17) The primary research questions of this analysis divulge into (1) How do the study informants feel about being part of LGBT and Muslim? (2) How the Indonesian lesbians negotiate their privacy communication management in a personal and relational context. (N1, Move 3)

Overall, active voice was more frequently employed in the realizations of all moves in both experienced and novice writers' corpora in terms of sentence voice. In all moves from both corpora, the frequency of active voice exceeds 67%. This can be construed that the majority of the writers wanted to leave an impression of a more direct approach in constructing their research article introductions.

Lastly, the linguistic features that were also analyzed were metadiscoursal units proposed by Hyland (2005). Of ten types of metadiscoursal units, this study only analyzed hedges and boosters. Hedges and boosters are considered the most frequently used metadiscoursal units in RAIs (Rubio, 2011).

This study found that experienced writers appeared to prefer boosters to hedges, while novice writers exhibited the opposite preference. The following table illustrates the distribution of hedge and booster at the move level.

| Table 4. The distribution of metadiscoursal units in both corpora |                         |                    |  |  |
|---|-------------------------|--------------------|--|--|
| Move  | Experienced writers (%) | Novice writers (%) |  |  |
| Move 1  | Hedges (45)             | Hedges (68.09)     |  |  |
|   | Boosters (55)           | Boosters (31.91)   |  |  |
| Maria 2   | Hedges (44.44)          | Hedges (50)        |  |  |
| Move 2  | Boosters (55.56)        | Boosters (50)      |  |  |
| Move 3  | Hedges (50)             | Hedges (50)        |  |  |
|   | Boosters (50)           | Boosters (50)      |  |  |

The use of hedges is presented in the following excerpts.

(18) Women **may** work at public domain, and it is not an exception if men do take part in domestic realm. (N4, Move 1)

(19) The research findings **can** be summarized, namely: The pattern of neuropeagogy from the results of the first year of research developed in the form of historical quotes ... (E5, Move 2)

As for boosters, the findings showed that it is preferable in Move 1 and 2 of experienced writers' introductions and Move 3 of novice writers' introductions. The following excerpts demonstrated the use of boosters in all moves.

- (20) In today's society, a significant emphasis is addressed on education since a good quality of education will guarantee wellprepared human resources to strive in the brave new world of digitalization (citation). (E3, Move 1)
- (21) From these two studies, there are indications that there are a number of reasons for the lack of results obtained from these studies, the **main** factor being the textbook. (N2, Move 2)

To conclude the findings on metadiscoursal units, the study found that experienced writers tend to use boosters in their introductions while novice writers prefer to use hedges.

### Discussion

The analysis revealed that all three moves (Establishing a Territory, Establishing a Niche, and Presenting the Current Work) were present in 100% of the introductions, regardless of the authors' experience. This aligns with Ding's (2007) notion that each move serves a specific purpose and contributes to the overall communicative goal of the introduction. This suggests that the three moves provided by Swales' (2004) revised CARS model were considered essential in crafting English Research Article Introductions (RAIs) by all writers from both corpora. This finding aligns with Amnuai and Wannaruk (2013) who observed a similar pattern in research articles written by Thai authors. Their study also found a 100% occurrence of all three moves within the introductions.

However, while all moves were utilized, variations emerged in the use of specific steps within each move. In realizing the steps in Move 2, both experienced and novice writers agreed to employ Step 1A (Indicating a Gap). The occurrence of this step reached 100%, while Step 1B (Adding to What is Known), and Step 3 (Presenting Positive Justification) are less preferred, with the occurrence of these steps being 20% and 0%, respectively. The high occurrence percentage of Move 2 Step 1A aligns with previous studies conducted by Afshar, Doosti, Movassagh, and Sina (2018), Ebrahimi and Weisi (2019), Kanoksilapatham (2015), and Rochma et al. (2020). This suggests that Indonesian writers prefer to point out the shortcomings of the prior study, implying that the current study is essential. This contrasts sharply with previous research findings where Step 1A was realized marginally in the RAIs of Chinese, Thai, and native English writers (Gao & Pramoolsook, 2023).

Considering the highest average occurrence of steps in Move 3 falls on Step 1, it is possible that both experienced and novice writers preferred to report the objective of the current study since it could give readers a glimpse of what to expect from the study. This finding corresponds with the findings of previous studies conducted by Ebrahimi and Weisi (2019), Jalilifar (2010), and Jogthong (2001). Overall, the analysis suggests that both novice and experienced writers demonstrate similar patterns in their move and step usage as prescribed by Swales (2004), regardless of the amount of experience in scholarly publication. This may imply that even less experienced writers are aware of the importance of following these established rhetorical structures when crafting RAIs. A larger dataset would be necessary to further corroborate this claim.

Regarding linguistic features, the findings reveal that both experienced and novice social science writers agreed on the need to use the present tense to convey the three steps (77.98% and 78.30%, respectively). This aligns with Amnuai and Wannaruk's (2013) study, which observed a prevalence of the present tense in introductions written for social science research articles.

Concerning voice, the finding on the realization of sentence voice in both corpora is similar. Active voice dominated the use of voice in both the experienced and the novice writers' corpora, with the frequency reaching 80.73% and 75.56%, respectively. The considerable usage of active voice in all moves of both corpora aligns with a prior study conducted by Nabilla et al. (2021), who analyzed introductions written by novice and experienced writers.

Lastly, the analysis of metadiscoursal features (specifically hedges and boosters) revealed a group difference. Experienced writers tended to use more boosters, while novice writers favored hedges. This finding seems to contradict Hariyanto et al. (2020) who observed a preference for hedges in introductions published in international journals (where most experienced writers published in this study). This discrepancy might be due to the limited scope of their study, which analyzed all metadiscoursal units, not just hedges and boosters. Future research could explore the use of a wider range of metadiscoursal markers to gain a more comprehensive understanding of how novice and experienced writers utilize these features within their RAIs.

# Conclusion

This study examined the organization and language used in research article introductions (RAIs) written by novice and experienced Indonesian social science writers. The analysis focused on introductions published in both international and national journals. The findings revealed both similarities and differences between the two writer groups. Notably, both novice and experienced writers consistently employed all three moves of the CARS model (Swales, 2004) within their introductions. This suggests a shared understanding of the importance of establishing territory, establishing a niche, and presenting the current work in a structured manner. Additionally, the study found a consistent preference for using the present tense and active voice across both datasets. This aligns with previous research on social science RAIs, suggesting a genre-specific convention.

While the overall move usage was similar, the study also identified some intriguing differences related to the writers' experience. Novice writers tended to utilize more steps within Move 2 (Establishing a Niche), particularly those related to highlighting gaps in existing research. In contrast, experienced writers relied more heavily on steps within Move 3 (Presenting the Current Work), potentially reflecting their comfort level with explicitly outlining their research objectives and methods. The analysis of metadiscoursal features also revealed a group difference.

Novice writers favored hedges, which might indicate a more cautious approach in constructing their introductions. Experienced writers, on the other hand, showed a preference for boosters, suggesting a more confident tone in presenting their research.

Despite its limitations in sample size, this study offers valuable insights into the writing practices of Indonesian social science researchers. The findings contribute to our understanding of how the writers' experience can influence the specific steps and linguistic features utilized within the CARS model framework. This knowledge can be beneficial for developing educational materials and workshops aimed at improving the writing skills of both novice and experienced researchers, particularly in Indonesia.

Future research with a larger dataset could further strengthen these conclusions and explore potential variations in move and step usage across different disciplines. Additionally, examining a wider range of metadiscoursal markers could provide a more comprehensive picture of how writers from various experience levels strategically utilize language to achieve their communicative goals within RAIs.

Overall, this study highlights the importance of considering the writers' experience when developing resources and training programs for academic writing. This revised version tailors the implications section to focus more on the Indonesian context and the social science field, aligning better with the study's focus. It also emphasizes the broader applicability of the findings for improving research writing skills.

# References

- Afshar, H. S., Doosti, M., Movassagh, H., & Sina B.A. (2018). A genre analysis of the introduction section of applied linguistics and chemistry research Articles. *Iranian Journal of Applied Linguistics*, 21(1), 163–214.
- Amnuai, W. (2019). Analyses of rhetorical moves and linguistic realizations in accounting research article abstracts published in international and Thaibased journals. *SAGE Open*, 9(1). https://doi.org/10.1177/2158244018822384
- Amnuai, W., & Wannaruk, A. (2013). An analysis of moves in introductions in international and Thai journal research articles. *PASAA*, 45(1), 61–90. <u>https://doi.org/10.58837/chula.pasaa.45.1.4</u>
- Arsyad, S., & Arono, A. (2016). Potential problematic rhetorical style transfer from first language to foreign language: A case of Indonesian authors writing research article introductions in English. *Journal of Multicultural Discourses*, *11*(3), 315–330. https://doi.org/10.1080/17447143.2016.1153642
- Biber, D. (2006). University language: A corpus-based study of spoken and written registers. Amsterdam/Philadelphia: John Benjamins. https://doi.org/10.1075/scl.23
- Briones, R. R. (2012). Move analysis of philosophy research article introductions published in the University of Santo Tomas. *Philippine ESL Journal*, 9, 56–75.

- Chang, C.-F., & Kuo, C.-H. (2011). A corpus-based approach to online materials development for writing research articles. *English for Specific Purposes*, 30(3), 222–234. https://doi.org/10.1016/j.esp.2011.04.001
- Cotos, E., Huffman, S., & Link, S. (2017). Furthering and applying move/step constructs: Technology-driven marshalling of Swalesian genre theory for EAP pedagogy. *Journal of English for Academic Purposes*, 46(1), 90–106.
- Ding, H. (2007). Genre analysis of personal statements: Analysis of moves in application essays to medical and dental schools. *English for Specific Purposes*, 26(3), 368–392. <u>https://doi.org/10.1016/j.esp.2006.09.004</u>
- Dueñas, M. D. (2010). A contrastive analysis of research article introductions in English and Spanish. *Revista Canaria de Estudios Ingleses*, *61*, 119–133.
- Ebrahimi, B., & Weisi, H. (2019). Genre variation in the introduction of scientific papers in Iranian and international computer science journals. *Issues in Language Teaching*, 8(2), 51-82. https://doi.org/10.22054/ilt.2020.49119.453
- Farnia, M., & Barati, S. (2017). Writing introduction sections of research articles in applied linguistics: Cross-linguistic study of native and non-native writers. *Indonesian Journal of Applied Linguistics*, 7(2), 486-494. https://doi.org/10.17509/ijal.v7i2.8357
- Flowerdew, J. (1999). Problems in writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing*, 8(3), 243–264. https://doi.org/10.1016/S1060-3743(99)80116-7
- Flowerdew, J. (2004). The argument for using English specialized corpora to understand academic and professional language. In U. Conner & T. A. Upton (Eds.), *Discourse in the Professions: Perspectives from corpus linguistics* (pp. 11–23). Amsterdam: John Benjamins.
- Gao, S., & Pramoolsook, I. (2023). A cross-cultural move analysis of electronic engineering research article introductions: The case of Chinese, Thai, and native English scholarly writers. *Ampersand*, 10, 100106. <u>https://doi.org/10.1016/j.amper.2022.100106</u>
- Geçíklí, M. (2013). A genre-analysis study on the rhetorical organization of English and Turkish PhD. *International Journal of Business, Humanities and Technology*, 3(6), 50–58.
- Hariyanto, H., Harahap, A., & Sofyan, D. (2020). A comparative research on metadiscourse markers used in introduction section on local, national and international journal articles of English education. *Journal of English Education and Linguistics*, 4(1), 61–79. <u>https://doi.org/10.32663/eduling.v4i1.1719</u>
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. London: Longman.
- Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing*. London: Continuum.
- Jalilifar, A. (2010). Research article introductions: Sub-disciplinary variations in applied linguistics. *Journal of Teaching Language Skills*, 2(2).
- Jogthong, C. (2001). Research article introductions in Thai: Genre analysis of academic writing [Doctoral dissertation]. West Virginia University, Morgantown, West Virginia.

- Kanoksilapatham, B. (2005). Rhetorical structure of biochemistry research articles. *English for Specific Purposes*, 24(3), 269–292. <u>https://doi.org/10.1016/j.esp.2004.08.003</u>
- Kanoksilapatham, B. (2007). Writing scientific research articles in Thai and English: Similarities and differences. *Silpakorn University International Journal*, 7, 172–203.
- Kanoksilapatham, B. (2015). Distinguishing textual features characterizing structural variation in research articles across three engineering subdiscipline corpora. *English for Specific Purposes*, 37, 74–86. https://doi.org/10.1016/j.esp.2014.06.008
- Kurniawan, E. (2023). Humanities dissertation abstracts in Indonesian and English universities: A comparative move analysis. *GEMA Online*® *Journal of Language Studies*, 23(2), 57–74. <u>https://doi.org/10.17576/gema-2023-2302-04</u>
- Kurniawan, E., & Haerunisa, Z. F. (2023). A comparative study of lexical bundles in accepted and rejected applied linguistic research article introductions. *Studies in English Language and Education*, 10(2), 628–648. <u>https://doi.org/10.24815/siele.v10i2.28119</u>
- Kurniawan, E., Lubis, A. H., Suherdi, D., & Danuwijaya, A. A. (2019). Rhetorical organization of applied linguistics abstracts: Does Scopus journal quartile matter? *GEMA Online*® *Journal of Language Studies*, 19(4), 184–202. <u>https://doi.org/10.17576/gema-2019-1904-10</u>
- Kurniawan, E., Ruswan, D., & Cahyowati, A. (2019). Exploring logical connectors in journals with different indexing levels: A comparison between international and national indexed journals. *Indonesian Journal of Applied Linguistics*, 9(1), 76-84. <u>https://doi.org/10.17509/ijal.v9i1.16088</u>
- La-o-vorakiat, A., & Singhasiri, W. (2021). Move analysis of chemical biology research article introductions. *LEARN Journal: Language Education and Acquisition Research Network*, 14(2), 313–341.
- Loi, C. K. (2010). Research article introductions in Chinese and English: A comparative genre-based study. *Journal of English for Academic Purposes*, 9(4), 267–279. https://doi.org/10.1016/j.jeap.2010.09.004
- Loi, C. K., & Evans, M. S. (2010). Cultural differences in the organization of research article introductions from the field of educational psychology: English and Chinese. *Journal of Pragmatics*, 42(10), 2814–2825. <u>https://doi.org/10.1016/j.pragma.2010.03.010</u>
- Lubis, A. H., & Kurniawan, E. (2020). A review of genre analysis of research abstracts: Lessons learned and recommendations for future research directions, pedagogical practices, and policies. In D. S. Anshori, P. Purnawarman, W. Gunawan, & Y. Wirza (Eds.), *Language, education, and policy for the changing society: Contemporary theory and research* (pp. 595–625). Bandung: Universitas Pendidikan Indonesia Press.
- Lubis, A. H., Kurniawan, E., & Gunawan, W. (2022). Does journal indexation matter? A genre-approach move analysis of nursing English research article abstracts. *Journal of Language and Education*, 8(2), 92–105. https://doi.org/10.17323/jle.2022.13471

- Luthfianda, S. N., Kurniawan, E., & Gunawan, W. (2021). Rhetorical structures of introductions in soft and hard science international journals written by Indonesian scholars. *Journal of English Language Teaching and Linguistics*, 6(2), 343–358. <u>http://dx.doi.org/10.21462/jeltl.v6i2.563</u>
- Nabilla, S., Luthfianda, S. N., Suherdi, D., Kurniawan, E., Gunawan, W., & Lubis, A. H. (2021). How do novice and experienced Indonesian authors rhetorically organize research article introduction? *Thirteenth Conference* on Applied Linguistics, 502–507.
- Peacock, M. (2011). The structure of the methods section in research articles across eight disciplines. *The Asian ESP Journal*, 7(2), 99–124.
- Qamariah, H., & Wahyuni, S. (2017). Writing Indonesian and English research article introduction: The implementation of Swales model. *Proceedings of the 1st International Conference on Innovative Pedagogy (ICIP)*, 427–433. <u>https://repository.bbg.ac.id/handle/501</u>
- Rahman, M., Darus, S., & Amir, Z. (2017). Rhetorical structure of introduction in applied linguistics research articles. *Educare: International Journal for Educational Studies*, 9(2), 69-84. <u>https://doi.org/10.2121/edu-ijes.v9i2.800</u>
- Rochma, A. F., Triastuti, A., & Ashadi, A. (2020). Rhetorical styles of introduction in English language teaching (ELT) research articles. *Indonesian Journal of Applied Linguistics*, *10*(2), 304–314. https://doi.org/10.17509/ijal.v10i2.28593
- Rubio, M.M.D.S (2011). A pragmatic approach to the macro-structure and metadiscoursal features of research article introductions in the field of agricultural sciences. *English for Specific Purposes*, 30(4), 258–271. https://doi.org/10.1016/j.esp.2011.03.002
- Ruiying, Y., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22(4), 365–385. <u>https://doi.org/10.1016/S0889-4906(02)00026-1</u>
- Safnil, S. (2013). A genre-based analysis on the introductions of research articles written by Indonesian academics. *TEFLIN Journal*, 24(2), 180–200. https://doi.org/10.15639/teflinjournal.v24i2/180-200
- Samanhudi, U. D. I. (2017). Introduction of research articles in applied linguistics by Indonesian and English academics. *Indonesian Research Journal in Education (IRJE)*, 1(1), 58–71. <u>https://doi.org/10.22437/irje.v1i1.4339</u>
- Setiawati, D., Nabilla, S. N., Suherdi, D., Kurniawan, E., Gunawan, W., & Lubis, A. H. (2021). A move analysis of research article introduction written by Indonesian authors: The case of soft and hard sciences. *Proceedings of the Thirteenth Conference on Applied Linguistics (CONAPLIN 2020)*, 127– 132. <u>https://doi.org/10.2991/assehr.k.210427.020</u>
- Soler-Monreal, C., Carbonell-Olivares, M., & Gil-Salom, L. (2011). A contrastive study of the rhetorical organisation of English and Spanish PhD thesis introductions. *English for Specific Purposes*, 30(1), 4–17. <u>https://doi.org/10.1016/j.esp.2010.04.005</u>
- Suherdi, D., Kurniawan, E., & Lubis, A. H. (2020). A genre analysis of research article 'findings and discussion' sections written by Indonesian undergraduate EFL students. *Indonesian Journal of Applied Linguistics*, 10(1), 59–72. <u>https://doi.org/10.17509/ijal.v10i1.24989</u>

- Suryani, I., Ahmad, N., Zubir, F., Ghazali, N., & Aclan, E. M. (2018). Description on research article introduction section by computer science researchers in Malaysian private universities. *Journal of Human Development and Communication*, 7(1), 1–8.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge: Cambridge University Press.
- Tessuto, G. (2015). Generic structure and rhetorical moves in English-language empirical law research articles: Sites of interdisciplinary and interdiscursive cross-over. *English for Specific Purposes*, 37, 13–26. https://doi.org/10.1016/j.esp.2014.06.002
- Warsidi, W., Adnan, Z., & Maniam, V. (2024). A contrastive genre-based study of English and Indonesian RAIs in the history discipline. *LEARN Journal: Language Education and Acquisition Research Network*, 17(1), 467-488.
- Xiao, W., Liu, J., & Li, L. (2022). How is information content distributed in RA introductions across disciplines? An entropy-based approach. *Research in Corpus Linguistics*, 10(1), 63–83. <u>https://doi.org/10.32714/ricl.10.01.04</u>
- Yang, R., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22(4), 365-385. <u>http://dx.doi.org/10.1016/S0889-4906(02)00026-1</u>
- Yasin, B., & Qamariah, H. (2014). The application of Swales' model in writing a research article introduction. *Studies in English Language and Education*, 1(1), 29-41. <u>https://doi.org/10.24815/siele.v1i1.1118</u>
- Zhang, Y., & Hu, J. (2010). A genre-based study of medical research article introductions: A contrastive analysis between Chinese and English. *The Asian ESP Journal*, 6(1), 72–96.