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Exploring the Recycling of Objective Move across Research Article Sections in Soft Science Disciplines

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Abstract

Although a plethora of research endeavors have investigated the rhetorical structure of the Research Articles (RAs) through the lens of move analysis, Move Recycling (MR) across RA sections has remained unnoticed. The current study sought to bridge this gap by exploring cross-disciplinary variations in the recycling of the Objective move (research questions/hypotheses/purposes) across four conventional sections (Introduction, Method, Result, and Discussion) of RAs. To this end, 600 English RAs from four prestigious journals in six soft science disciplines, published between 2006 and 2018, were selected. The quantitative data analysis results revealed that the Objective move's recycling was sensitive to the disciplinary variations and RA sections. That is, Economics RAs were the main platforms for recycling the Objective move, and Psychology RAs witnessed the least amount of its recycling. Moreover, Objective move recycling was observed most frequently in the Discussion sections and least frequently in the Method sections of RAs. In the study's qualitative phase, the RA authors' rationales for MR, which were received via email, underwent content analysis. Based on the recurrent themes in the RA authors' responses, four main reasons for MR, including editorial policy, readers' guidance, discipline conventions, and RA length, were identified. This study's findings might provide a concise view of MR for researchers, teachers, and students in various disciplines. EAP instructors can raise students' awareness of MR and encourage them to use it in their RAs as a comprehension facilitator.

***Keywords*:** Disciplinary variation, Move recycling, Research article, Soft sciences, Objective move

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INTRODUCTION

Over the past decades, there has been increasing attention to the notion of genre and its application in language teaching and learning (Hyland, 2004). Move analysis is one of the well-known approaches to genre analysis developed within the English for Specific Purposes (ESP). A move alludes to "cognitive structures which serve certain communicative intentions and are subservient to the overall discourse communicative purpose of the genre" (Bhatia, 1993, pp. 30-31). According to Nwogu (1997), move analysis identifies schematic units or moves within the text. Move analysis of RAs plays a crucial role in making visible the underlying rhetorical structure of this genre (Swales, 1990). Thus, it is beneficial to raise non-native and novice researchers' and students' awareness of such structures and improve their RA writing ability (Hyland, 2002; Loi & Evans, 2010; Swales & Feak, 2009).

On the other hand, according to Moreno (2003), academic writing differs considerably across disciplines due to disciplinary cultures and their particular epistemologies. The variations between disciplines, in turn, can affect how knowledge is communicated and presented to its target audience (Hyland & Bondi, 2006). Genre analysis enables researchers to identify the different kinds of arguments valued by different disciplines. According to Malmir et al. (2019), the significance of these studies is that understanding the structure of already published RAs in various disciplines increases authors' knowledge of the disciplinary cultures. In turn, this awareness helps students follow their discipline-specific conventions and become participants in their discourse communities (Hyland, 2002). It might be the reason why a burgeoning number of move-based studies have focused on cross-disciplinary variations (Ge & Yang, 2005; Peacock, 2011; Samraj, 2002; Stoller & Robinson, 2013; Yakhontova, 2006). Therefore, attempts should be made to uncover such schematic structures and conventions prevalent in texts of various discourse communities.

In this light, one of the established conventions of English RA writing in soft science disciplines, coined by Swales (1990), is *Move Recycling* (MR). According to Swales (1990), MR deals with considering each incidence of a specific move as a separate occurrence. Swales' introduction of MR has been served as a springboard for various interpretations by several researchers, most of which are related to MR within a single section of the RAs. For instance, according to Bunton (2002), MR provides alternate ways to realize a given text's basic moves. From Kanoksilapatham's (2007) point of view, text in MR often switches from one type of move to another and then back to the first one. According to Biber et al. (2007), in MR, a single move type occurs more than once, and each appearance of it is counted as a distinct occurrence. Furthermore, Tessuto (2015) believes that applying MR is essential to reveal the moves' expansiveness.

Although it is possible to trace works related to MR within a single section of RA, such as Introduction (Lim, 2012; Ozturk, 2007), Method (Lim, 2006; Peacock, 2011), Results (Atai & Falah, 2005; Kanoksilapatham, 2005), and Discussion (Basturkmen, 2009, 2012; Sheldon, 2019), it is not easy to find an accurate record of studies reporting MR in the four conventional sections of RAs, including the Introduction, Method, Results, and Discussion (IMRD) sections of soft science RAs.

While MR within a single section of RA can be used to emphasize the importance of the recycled moves, the researchers believe that MR across IMRD sections is more crucial because it not only highlights the significance of a specific move but can also be regarded as a writing strategy for communicating with readers. In fact, taking the trouble to anticipate where readers may require assistance in understanding particular moves, writers repeat such moves throughout RA sections. Besides, MR across RA sections may activate readers' background knowledge of previously occurred moves and reminds them of such moves. This, in turn, helps readers correctly grasp the writers' intentions, encourages them to keep reading, and allows them to read consistently and coherently without

rechecking recycled moves. To put it another way, by employing MR across RA sections, RA authors strive to facilitate readers' reading comprehension.

Despite the substantial advantages that the knowledge of MR across IMRD sections of RAs may offer to course designers, teachers, students, and researchers, this area of the move analysis appears to have been downplayed in the previous studies. Negligence of this knowledge may cause inexperienced and novice RA authors and students to recycle moves inappropriately or haphazardly in their RAs. However, they need to become familiar with the pivotal role that MR plays in making a cohesive text.

To address the aforementioned gap in the literature, Soltani et al. (2021) conducted an intercultural study and discovered that, among other moves, the Objective move (research questions/hypotheses/purposes) was frequently recycled in all four sections of RAs. The considerable frequency of Objective move recycling might highlight the importance of this move in soft science RAs. This intriguing discovery prompted the researchers to conduct the current study, aiming to determine whether the recycling of the Objective move across RA sections is sensitive to disciplinary discrepancies. Furthermore, six disciplines, including Linguistics, Applied Linguistics, Psychology, Economics, Management, and Sociology, as representatives of soft science, were selected to provide a wide range of disciplines and generalizability of the results.

LITERATURE REVIEW

In his first attempt to study RA Introductions' rhetorical organization, Swales (1981) analyzed a small scale of Introduction sections from three diverse academic disciplines, including Social Sciences, Physics, and Biology/Medicine. In this study, Swales realized that the three disciplines shared the same recurring pattern in their Introduction sections and developed a four-move model: move 1: Establishing the field; move 2: Summarizing previous research; move 3: Preparing for present research; move 4: Introducing present research. Swales' (1981) four-move model was

criticized for some deficiencies.

Some researchers, notably Crookes (1986) and Hopkins and Dudley-Evans (1988), have found that RA Introductions were not always linearly organized. That is, cyclical patterns of moves were possible, especially in longer Introductions. Crooks (1986) further argued that, according to the disciplines, the incidence of repeated cycles of moves increased. That is, articles in social science journals tended to have much longer and more complex introductions. In longer Introductions, "a variety of alternatives is possible" (p. 65).

Other researchers, such as Lopez (1982) and Selinker (1984), posited that the first two moves were inextricably linked together and could not be analyzed separately in some RAs. Hence, Swales (1990) merged moves 2 and 1 in his previous model and introduced a three-move model known as Create a Research Space (CARS) model. In addition, he acknowledged that certain types of moves could occur more than once in the Introduction sections and referred to this recurrence of moves as Move Recycling (MR). According to Swales (1990), the length factor is likely to contribute to MR in the RAs of Social Sciences.

MR has been documented in numerous studies investigating RA Introductions' move structure (Ebrahimi, & Weisi, 2019; Kanoksilapatham, 2007; Lim, 2012; Ozturk 2007; Posteguillo, 1999; Samraj, 2002; Swales; 1990, 2004). For instance, in her study of the IMRD sections of Biochemistry RAs, Kanoksilapatham (2007) found that Introduction moves did not necessarily occur sequentially, consisting of M1 followed by M2 and M3. Instead, variation in Moves' order is possible so that the text may switch from one move type to another and then back to the first one again.

In a similar vein, using Swales' (1990) CARS model, Lim (2012) analyzed the Introduction sections of 30 Management RAs and found recycling of M1, M2, and M3 in the majority of Introductions.

The occurrence of the Objective move, previously found in the Introduction section of the RAs, has been reported in the RA Method sections by some scholars such as Peacock (2011). He examined the Method

section of 288 RAs in eight disciplines and recognized that the Objective move appears in the Method sections of 67% of Public and Social Administration RAs, 58% of RAs in Law, 36% of RAs in Business, 22% of RAs in Language and Linguistics, 11% of RAs in Environmental Science, 6% of RAs in Physics, 3% of RAs in Biology, and 0% of RAs in Chemistry.

Similarly, earlier studies have shown that the recycling of the Objective move, previously established in the Introduction sections, also takes place in the Results section of the RAs (Atai & Falah, 2005; Brett, 1994; Kanoksilapatham, 2005; Posteguillo, 1999; Yang & Allison, 2003). For example, Posteguillo (1999), in his study of Computer RAs, claimed that the recurrence of objectives of the study, in the Results section, could be related to the length of the RAs. According to Posteguillo (1999), in long RAs, the author might feel a need to establish a link between the Introduction and Results sections and simultaneously remind readers of the study's objective.

The Objective move recycling has also been extensively reported in the Discussion sections (e.g., Ershadi & Farnia, 2015; Joseph & Lim, 2018; Kanoksilapatham, 2005; Peacock, 2002; Sheldon, 2019). However, various terminologies have been suggested for this move, such as 'Contextualizing the Study' by Kanoksilapatham (2005), 'Background Information' by Joseph and Lim (2018), and 'Focus of the Study' by Sheldon (2019). According to Joseph and Lim, this move was present in 100% of the Discussion sections in Law (Tessuto, 2015), 90 % in Biochemistry (Kanoksilapatham, 2015), 71.5% in Biology (Peacock, 2002), and 60 % in Dentistry (Basturkmen, 2012).

A close review of the literature shows that MR has been reported within an individual section of RA. Although the focus on the individual section of the RAs reveals how this section is organized (Kanoksilapatham, 2015), it does not reveal how various sections of the RAs are connected. Many studies have been carried out in the Iranian context via the move analysis lens (e.g., Afshar et al., 2018; Ershadi & Farnia, 2015; Farzannia & Farnia, 2017; Jalilifar & Dastjerdi, 2010; Rezaee & Sayfouri, 2009).

However, they have examined other aspects of the move analysis and have not concentrated on MR. In addition, some previous studies used different types of interviews to validate quantitative findings, such as Afshar et al. (2018) and Salimi and Karami (2019) but did not involve actual RA authors' perspectives in the use of particular structures such as MR in their studies. Therefore, to fill the gaps mentioned above, the present study investigated the recycling of the Objective move in the IMRD sections of the RAs in six soft science disciplines.

PURPOSE OF THE STUDY

This study aimed to investigate whether the recycling of the Objective move was sensitive to the RA sections' and disciplines' variations. Additionally, it sought to investigate RAs writers' rationales for MR to validate the quantitative findings. Therefore, the following research questions guided the purpose of the present study:

1. What are the differences between the six disciplines of soft science in recycling the Objective move across IMRD sections of RAs?
2. Why do RA authors in the disciplines under study recycle the Objective move?

METHOD

Design of the Study

The present research employed a mixed-method design using both quantitative and qualitative data analyses. The study's quantitative phase consisted of frequency counts of Objective move recycling across the IMRD sections of RAs and the differences across disciplines in recycling this move. The qualitative or explanatory phase of analysis dealt with the analysis of RA authors' reasons for MR.

Quantitative Phase of the Research

The Corpus

Six hundred empirical English RAs with IMRD structures in the six disciplines of the soft sciences, including *Linguistics, Applied Linguistics, Psychology, Economics, Management, and Sociology* with equal numbers (i.e., 100) in each discipline, published from 2006 to 2018 in four prestigious journals, were selected as the corpus of the current study. The reasons for selecting these disciplines were as follows: (a) according to Swales (1990), MR occurs in soft science RAs, (b) in light of previous studies, the disciplines mentioned above were found to be representative of soft sciences, and (c) RAs in the selected disciplines had IMRD structures that were essential for the current study's purpose. To ensure consistency and generalizability of the results, two empirical English RAs were chosen from each volume of the selected journals over the last thirteen years (RAs were downloaded in late 2018). It might be worth noting that the authors' cultural background has not been considered in the present study.

The Journal Selection Process

After specifying the disciplines of the study, based on the existing practice of selection and sampling in other studies—informant nomination— (e.g., Harwood, 2005; Hyland, 2002; Posteguillo, 1999), four experienced university lecturers in each of the disciplines of the present research were separately asked to name four prestigious journals in their fields of study. Out of the 16 nominated journals, four journals with the highest number of frequencies in their recommendations were selected (please see Table 1 for the selected journals).

Table 1: *List of selected journals*

	Disciplines	Journals
	Applied Linguistics	English for Specific Purposes (ESP), Language Teaching, Modern Language Journal (MLJ), System
	Economics	Energy Economics, Energy Policy, Economic Modeling, Cambridge Journal of Economics
	Sociology	European Journal of Sociology, International Journal of Sociology, Sociological Review, American Sociological Review
	Management	British Journal of Management, Journal of International Management, Journal of Management, International Journal of Management Reviews
	Psychology	Europe's Journal of Psychology, British Journal of Social Psychology, British Journal of Clinical Psychology, Psychology, and Psychotherapy
	Linguistics	Australian Journal of Linguistics, International Journal of Linguistics, Journal of English Linguistics, Journal of Linguistics

Model of Analysis

Although the present study was exploratory, Weissberg and Buker's (1990) move model was used as a road map to compare the current study's results with this model. In this model, the Objective model is prevalent in the Introduction, Results, and Discussion sections. However, it is not present in the Method section.

The reason for the selection of this model was that (a) it deals with the moves that are present in the IMRD sections of the RAs, and (b) it is not developed based on analyzing a single discipline (i.e., Weissberg and Buker focused on 12 disciplines and provided a list of moves that empirical RAs must include). Therefore, the model can be considered to be comprehensive and appropriate for this study.

Quantitative Data Analysis Procedure

After downloading the RAs from the website and selecting the RAs that made up the study corpus, they were coded for easy reference. For instance, E1-E100 stood for articles in the field of Economics. The analysis was carried out manually and primarily by the researchers. However, to address the move analysis's subjective nature, another rater with experience in move analysis was invited to analyze half of the corpus independently. IMRD sections of the RAs were explored to identify the Objective move. It is worth mentioning that following well-known scholars such as Swales (1990), Peacock (2011), Joseph and Lim (2018) in this study, the Objective move was used as an umbrella term for the study purposes or research questions or research hypotheses. The identification of this move was mainly based on its communicative values. However, textual signals were also used as complementary devices (see the example provided for MR, where the textual signals are written in italics).

After identifying the Objective move in the RA sections, its recycling frequency across the RA sections of the six disciplines was calculated. Inter-rater reliability was then calculated, resulting in high reliability (r = .89). Besides, to ensure intra-rater reliability, 30% of the corpora were analyzed by the researchers approximately one month after the initial analysis, which showed high reliability (r = .95). Since the RAs were not equal in length, the obtained frequencies were normed as occurrences per 10,000 words and rounded up. The results obtained were then entered into SPSS (version 22). Finally, a Chi-square test was conducted to determine the significance of the differences across the study's disciplines in Objective move recycling.

The following example illustrates how the Objective move has been recycled in the *Introduction and Discussion* sections of an Economics RA (Moshiri, & Moghaddam, 2018).

1. In this study, we *investigate* the effects of the oil price shocks on the Canadian economy (***Introduction***).
2. We *investigate* whether the Canadian economy has responded differently to this sharp increase in prices in the global oil markets (***Introduction***).
3. *We test* for asymmetry in the effects of positive and negative oil price shocks on the economic growth of the provinces (***Introduction***).
4. *We analyze* the dynamic relationship between oil price shocks and economic growth … (***Discussion***).

Quantitative Data Analysis

To address the first research questions, initially, the calculated frequencies of the recycled moves in IMRD sections of RAs were normed per occurrence in 10,000 words. Then, the obtained frequencies were fed into SPSS version 22. The Chi-Square test was run due to the categorical nature of the variables.

Qualitative Phase of the Research

Participants

In the qualitative phase of the study, 120 RA authors were invited to participate in the study via email and explain their rationales for applying MR.

The Corpus

To build a corpus of the second phase, 120 RAs, with equal numbers in each discipline (i.e., 20 RAs from each discipline), were randomly selected.

Instrumentation

In order to elicit the RA authors' reasons for recycling the Objective move,

they were asked why they recycled this move through their RA sections via emails.

Qualitative Data Collection Procedure

In the qualitative phase, 120 RA writers (20 from each discipline) were invited to participate in the study via emails. Since the concept of MR was technical, and RA authors from various disciplines might not be familiar with it, they were not explicitly questioned about it. Instead, to draw the RA authors' attention to the use of MR, their sentences representing MR were categorized in the Word files and mailed to them along with their RAs. In addition, one open-ended question was used to ask them why they used these sentences so frequently in various sections of their papers. To gain their consent, they were assured that their responses would be kept confidential and used anonymously in the study (please see Appendix A for the email content). Only 38 of the 120 invited authors responded to the emails, eight of which were ignored because their responses indicated they were either reluctant to participate in the study or did not know the answer. The remaining responses were subjected to content analysis to categorize the frequency and percentage of recurring themes for subsequent interpretation.

Qualitative Data Analysis

Analysis of the qualitative data collected through email interviews was done through the content analysis method. In so doing, the email contents were carefully read and compared so that similar dimensions or recurring themes could be identified. Finally, the frequency and percentage of the recurring themes were calculated and tabulated (please see section 4.2).

RESULTS

Data Analysis for Research Question 1

The first research question aimed to investigate possible variations between the study disciplines in recycling the Objective move across IMRD sections of RAs. Table 2 displays the descriptive statistics of recycling this move across the IMRD sections of soft science RAs included in this study. It might be worthy to note that they are not raw frequencies. They are normed per 10000 words and rounded up.

Table 2: *Frequency of objective move recycled in the IMRD sections of soft science RAs (per 10,000 words)*

	Disciplines	Lin	AL	Eco	Man	Psycho	Socio	Total
Sections	Introduction	29	38	64	44	27	52	254
	Method	10	16	48	23	4	29	301
	Results	17	23	43	30	10	36	159
	Discussion	61	70	87	74	57	75	424
Total		117	147	242	171	98	192	967

Note. Lin = Linguistics; AL= Applied Linguistics; Eco = Economics; Man = Management; Psy = Psychology; Soc = Sociology.

As Table 2 displays, based on the frequency of Objective move recycling, soft science disciplines can be arranged as follows: Economics (f = 242), Sociology (f = 192), Management (f = 171), Applied Linguistics (f = 147), Linguistics (f = 117), and Psychology (f = 98). Furthermore, the frequency of this move in the IMRD sections of RAs can be organized as follows: Discussion (f = 424), Introduction (f = 254), Results (f = 159), and Method (f = 130). A close examination of these findings reveals that the Objective move recycling occurs more frequently in the Discussions and less frequently in the Method sections. Besides, it can be found most frequently in Economics RAs and least frequently in Psychology RAs. A Chi-square test was conducted to investigate whether the difference in Objective

move's recycling frequency in the IMRD sections of the six soft science disciplines is significant.

Table 3: *Chi-square test for the differences of objective move recycling in the IMRD sections of soft science RAs*

	Df	Valid Cases	Asymp. Sig. (2- sided)	Cramer's V
Pearson Chi-Square	15	967	.006	.105

Based on Table 3, this difference's magnitude is significant, X^2 (15, 967) = .006, $p < .05$, Cramer's V = .105.

Data Analysis for Research Question 2

To address the second research question, "Why do RA authors in the study's disciplines recycle the moves?", some RA authors' reasons for MR are included. It is worthy of mentioning that the recurring themes were written in bold types by the researchers.

Excerpt 1 (Management)

> *These repetitions are strategic and planned because the* ***readers*** *don't read the entire paper, and authors want to ensure* $\underbrace{\textbf{\textit{the readers}}}_{\textbf{\textit{Reason1}}}$ *don't miss anything important. For example, when the aim was repeated in the Discussion, I could* ***remind the reader*** *of the purpose.*

The only explanation given by this author for MR was to remind the reader of the Objective move. As the majority of RA writers pointed out to readers' guidance, it was considered the main reason for MR.

Excerpt 2 (Applied Linguistics)

> *I would say that these pieces of information in my article are*

repeated due to $\underbrace{\textbf{the conventions}}_{\textbf{Reason2}}$ *that have been established in my field and also to make it easier for* $\underbrace{\textbf{the readers}}_{\textbf{Reason1}}$ *to understand the writer's purpose.*

In cases that RA authors mentioned more than one reason, their reasons were coded distinctly. As shown in the second excerpt, the author has mentioned two reasons: the convention of discipline and readers' guidance which are coded separately.

Excerpt 3 (Sociology)

Repetition seems necessary to convey the message. I think it is a useful technique for ***guiding*** $\underbrace{\textbf{readers}}_{\textbf{Reason1}}$ *since it acts as a cue for* ***the readers*** *to connect different sections of articles, especially in* $\underbrace{\textbf{long articles}}_{\textbf{Reason3}}$ *and tempts them to continue reading.*

The authors cited the length factor, especially in longer RAs such as Economics and Sociology, as the third reason.

Excerpt 4 (Linguistics)

1- The first reason for these repetitions is to ensure $\underbrace{\textbf{the readers}}_{\textbf{Reason1}}$ *who choose to read only one part of the paper would have a clear image of the study.*

2- It is also a prerequisite from $\underbrace{\textbf{respected journals}}_{\textbf{Reason4}}$ *to clearly state in different parts of the paper what the aim of the submitted study is.*

Finally, consideration of the journal's policy was stated least frequently in the authors' responses and coded as the fourth reason for MR. As mentioned earlier, 38 authors out of 120 invited RA authors replied to

our emails, out of which only 30 were analyzed. Despite the limited number of responses, they were extremely beneficial in providing the researchers with a greater understanding of the quantitative results and why RA writers recycle the Objective move in their RAs. After analyzing the RA authors' responses, four main reasons for MR were identified: the readers' guidance, the academic writing convention, the length of the article, and the editorial policy. The frequency and percentage of these reasons are shown in Table 4.

Table 4: *Frequency and percentage of the RA authors' reasons for MR*

Readers' Guidance	Convention	Article Length	Editorial Policy
25	19	13	5
83.33%	63.33%	43.33%	16/66%

Note. The number of RA writers whose responses were subjected to content analysis was 30.

As Table 4 represents, 25 of the 30 writers (83.33%) pointed to "readers' guidance" as their motives for MR. It might be suggested that RA authors' main impetus for MR is to support their readers and help them understand the objective/s of their studies. The second reason for MR, as stated by 19 researchers (63.33%), was the discipline convention. It appears that RA writers are seeking to pursue the principles of English academic writing in their papers, which are developed and established in their specialized field of study. The third reason for MR, as illustrated in Table 4, was the length of the RAs, reported by 13 (43.33%) RA writers. Finally, the editorial policy or journal limitation was found only in 16.6% of RA authors' responses. It seems that editors and reviewers do not always strictly impose prescriptive MR templates, which researchers' should follow.

One could claim that the four principal reasons for MR raised by RA authors are interrelated. For instance, it could be asserted that discipline-specific conventions require Economic RA authors to write long RAs. The frequent use of MR, in turn, makes it easier for readers to understand these long RAs. Furthermore, following the standard of English academic writing

in each discipline satisfies journals' editors and reviewers. One of the authors also tackled this argument:

Excerpt 5 (Applied linguistics)

> *I would say that the information in my article is repeated due to the conventions established in my field and to make it easier for the reader. In fact, I would say these two are connected. My guess is these* ***conventions*** *were established* ***to help the reader*** *understand the writer's position and purpose.*

DISCUSSION

The current study sought to investigate cross-disciplinary variations in the Objective move recycling across IMRD sections of RAs. This section provides a brief discussion of the results obtained in light of the quantitative and qualitative data analyses.

The Effect of Disciplinary Culture

The quantitative results showed a sharp variation in the recycling of the Objective move across the disciplines of study. The most noticeable difference was that the Economics RAs were the major platforms for landing the Objective move recycling. The Psychology RAs were in the opposite position, witnessing the least amount of its recycling. The other disciplines' positions were somewhere between Economics and Psychology RAs, and they can be arranged as follows: Sociology, Management, Linguistics, and Applied Linguistics. These discrepancies are presumably because of the specific standards, priorities, and norms in each academic discipline as defined and established by discourse community members in these disciplines. In Hyland's (2015) words, the sets of conventions establish a disciplinary scheme that allows writers to assume a certain amount of background knowledge in their audiences and use unique codes to interact with them. Furthermore, according to Hyland (2000), when

writers strive to persuade their audiences, they need to express their messages in appealing ways to their appropriate discourse communities. Consequently, it can be asserted that RA authors use MR to the extent that they strictly adhere to particular criteria, standards, and conventions in their respective disciplines. This argument is in line with Spack (1988), who suggests that writers should consider disciplinary conventions when writing in a specific discipline.

The observed disciplinary variations could be confirmed by the results of previous studies revealing similar results (Ge &Yang, 2005; Holmes, 1997; Hyland, 2015; Joseph & Lim, 2018; Kanoksilapatham, 2005, 2007; Posteguillo, 1999; Samraj, 2002; Stoller & Robinson, 2013; Yakhontova, 2006). For instance, Samraj (2002) and Joseph and Lim (2018) posit that one discipline's conventions are not always applicable to other disciplines. In a similar vein, Kanoksilapatham (2007) and Stoller and Robinson (2013) proposed that the textual organizations of disciplines are distinct.

The RA Sections' Influence

Another finding of the current study was that Objective move recycling varies across IMRD sections of RAs. During the data analysis, it was noticed that the Objective move's recycling frequently occurs in the Introduction sections of RAs, particularly in the longer Introductions. Several scholars analyzing move structure of the Introduction section have emphasized that complexity (Samraj, 2002; Swales, 1990) and length (Crookes, 1986; Hopkins & Dudley-Evans, 1988; Swales, 1990) are the two main factors contributing to MR in the Introduction section of social science RAs. It might be argued that RA authors use MR in the Introductions to elaborate on the main moves prevalent in this section, enhance clarity, and help readers understand these moves. Furthermore, authors' ample use of the Objective move in the lengthy Introduction of some disciplines, such as Economics, may demonstrate the importance of this section among their

discourse community. They may also recycle this move several times to emphasize it and facilitate readers' understanding of this move.

The findings also showed that recycling of the Objective move, previously occurred in the Introduction section, was least common in the Method section. Since the Method section appears sequentially after the Introduction section, where readers have already encountered the Objective move sufficiently, authors may assume that readers are not required to be informed about this move in the Method section once again. However, the situation in longer RAs, such as Economics, is slightly different. Since the Introduction and Method sections in this discipline are longer than those in other disciplines and readers may lose track of what the Objective move was, the authors may feel the need to remind readers of this move in the Method section. Moreover, congruently with Peacock (2011), the diverging frequency of the Objective move in the Method sections in the current study disciplines could be attributed to the discipline-specific characteristics. However, this finding was not in line with Weisberg and Bukers (1990), who did not report the presence of the Objective move in the Method sections of their proposed model for IMRD sections of RAs.

The Results section was in the third position based on the hierarchy of occurrence of the Objective move recycling. It might be stated that the recycling of this move in the Results section, particularly in long RAs, links the Results section to the Introduction section. According to Posteguillo (1999), in long RAs, the writer might feel obligated to establish a connection between the Introduction and the Results sections and, concurrently, remind readers about the study's objective of the study in the Results section. This recycling could facilitate the RA's readability, expedite their reading, and allow readers to remember this move without checking it back. This finding is in agreement with the results of earlier research, such as those undertaken by Yang and Allison (2003), Atai and Falah (2005), Kanoksilapatham (2005), and Bruce (2009), to name a few.

MR was most frequent in the Discussion sections. The recycling of the Objective move, previously found in the Introduction sections and

variously called "Background information" by Joseph and Lim (2018), "Focus of the study" by Sheldon (2019), and "Contextualizing the study" by Kanoksilapatham (2005) has been documented in previous studies (Annesley, 2010; Basturkmen, 2012; Ershadi & Farnia, 2015; Holmes, 1997; Kanoksilapatham, 2007, 2015; Peacock, 2002; Sheldon, 2019; Swales & Feak, 1994; Tessuto, 2015; Yang & Allison, 2003). For instance, according to Annesley (2010), many researchers consider it necessary to reiterate this move at the beginning of the Discussion sections. In Swales and Feak's (1994) point of view, the presence of the Objective move in the Discussion section is a springboard to provide the background to the research aims. According to Basturkmen (2012), Sheldon (2019), and Joseph and Lim (2018), the rhetorical function of the Objective move in the Discussion section is to restate this move, which has already been defined and established in the Introduction section.

The high frequency of Objective move recycling in the RA Discussion sections can be attributed to the greater distance between the Introduction and Discussion sections. It may illustrate how RA writers endeavor to bridge the gaps between the two sections by recycling this move in the Discussion sections. Moreover, this may pave the way for readers to have a straightforward reading without rechecking the Objective move. Therefore, it might be stated that RA authors try to provide background information in the Discussions to facilitate their target readers' reading comprehension. This claim can be confirmed by Joseph and Lim (2018), who reported "Background information" move was present in 95% of Forestry RA Discussions and suggested that the rhetorical function of this move in the Discussion section is to refresh readers' memory.

RA Length

Another reason for MR could be the length of the RA. One interpretation is that when a load of new information with too little repetition is presented, the text would be boring to read and difficult to understand, which could, in

turn, disrupt coherent reading. Therefore, a certain amount of repetition is required to expedite reading comprehension, especially in the long RA, where readers need to keep track of their reading. Hence, it can be suggested that MR gives coherence to the texts, and this coherence adds to the readability of the manuscript.

In addition, as mentioned above, the findings revealed numerous recycling of the Objective move in Economics and the subtle recycling of this move in Psychology RAs. These variations can be partly explained by the fact that the Psychology RAs with approximately 5000-7000 words were half the length of the Economics RAs with 12000-14000 or more words. Besides, despite the limited number of email responses received from RA authors, it was noticed that the length factor was predominantly addressed by Economics and Sociology RA authors. This may indicate that RA authors in such disciplines are aware that the readers need to be provided with more comprehension cues such as MR in longer RAs and respond to this need accordingly. It seems that the permitted length of the article gives Economics RAs writers more freedom to recycle the Objective move. In contrast, the length of RAs in Psychology is comparatively short, and this space limitation restricts the authors' frequent use of MR. Furthermore, readers may not need to be confronted with MR in relatively short RAs, such as Psychology, as much as in long RAs.

Journal Limitation

The next reason for MR, which follows closely from the reasons discussed above, is the editorial policy and journals' limitations. Only five RA authors referred to this reason. It is not easy to determine the extent to which a particular journal emphasizes MR. However, each journal creates particular norms and frameworks that researchers have to follow. As authors of the RA seek acceptance and appeal to the members of their discourse communities, above all are editors and reviewers of journals, they would face rejection if they step far outside journal conventions.

Furthermore, in the scientific world where scholarly journals have mushroomed for various disciplines, journals' editors and reviewers have to manage their precise time and selectively invest it to peruse those RAs that follow the journal's frameworks. Therefore, the potential sanctions of papers' rejection may strongly motivate authors to follow journal conventions.

Readers' Guidance

Based on the information presented in Table 3, it can be seen that the primary justification of RA writers for MR is to contribute to the reader's understanding of the texts. This orientation towards the reader can be approached from a sociocultural and social interaction point of view that appear to be complementary.

From the sociocultural view, English academic texts follow a writer-responsible culture where writers take on readers' roles and monitor their texts to see them through readers' eyes and anticipate where readers may need more comprehension facilitators (Kuhi, 2017). Additionally, from the social-interactionist point of view, writing is a form of social interaction through which writers communicate with their readers not only by conveying their messages but also by making them easier for readers to understand. As Widdowson (1978) points out, writing is a reciprocal phenomenon in that writers focus on written texts and assess their readers' reception. This allows authors to create their texts in such a way that readers are more likely to understand them. The objective could be achieved by providing adequate signals for text comprehension, such as MR. In other words, by recycling the Objective move across the RA sections, writers may seek to support readers by reminding them of what this move was without having to recheck it.

CONCLUSION AND IMPLICATIONS

Inspired by Swales' (1990) definition of MR, the Objective move's

recycling across the IMRD sections of six soft science disciplines was explored. The observed variations across disciplines led to the conclusion that RA authors may use MR to strictly adhere to particular criteria, standards, and conventions established in their respective disciplines to persuade their audiences, including their readers, editors, and reviewers of the journals.

In addition, the recycling of the Objective move appeared most frequently in the Discussion sections and least frequently in the Method sections of the RAs. This finding highlighted that the greater the distance between the Introduction section and the next section of the RA, the greater the likelihood of Objective move recycling.

In the qualitative phase of the study, the RA authors' low response rate was meaningful. It can be concluded that all RA authors might not be familiar with MR's pivotal role in facilitating reading comprehension. However, even these limited numbers of responses were insightful and made it clear that why they recycle the Objective move in their RAs. This phase's findings also supported the social interactive and sociocultural perspectives as two sides of the same coin. This, in turn, enabled the researchers to conclude that RA authors may use MR to address readers' needs for some sort of comprehension facilitators for text understanding.

The current study's findings may lead course designers to develop discipline-specific materials for EAP and ESP writing classes in which MR is emphasized. EAP writing instructors can secure a prominent place for MR consciousness-raising through focused lessons where this rhetorical device's importance across disciplines is highlighted. This may also help students build appropriate schemata and have a clear picture of how the Objective move is recycled in the IMRD sections of various soft science disciplines. Consequently, they may have MR as a functional strategy at their disposal when composing RA and use it following the norms and standards of their respective disciplines.

Moreover, students and researchers may know that if they did not comprehend an Objective move in its first manifestation, they could find

this move with different word ordering in various sections of RAs. In turn, this strategy helps them have a coherent reading. Besides, students may be more vulnerable to RAs as a form of social engagement with other members of their community practices. This, in turn, may lead them to write their RAs with a greater sense of responsibility to their readers and fulfill their needs for MR.

The current study may open new horizons for untrodden paths of research and further investigations. Further studies on the other disciplines can allow researchers to reflect on various disciplinary conventions in applying MR. Another consideration for further research is explicit instruction of MR in a pedagogical setting. For instance, researchers can design experimental studies in which they explicitly teach MR and then examine the impact of such instruction on students' ability to apply it appropriately in their RAs. In addition, as researchers with different disciplinary backgrounds and various proficiency levels might not be familiar with MR, the investigation in the second phase of the study may raise their awareness of this concept. For example, researchers could use the questionnaire in a Likert scale format to familiarize researchers with MR and elicit their reasons for MR more easily.

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