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**META-DISCOURSE MARKERS IN INTRODUCTION AND
LITERATURE REVIEW SECTIONS OF MANAGEMENT
ARTICLES WRITTEN BY IRANIAN AND FOREIGN
SCHOLARS**

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Abstract

This study aimed to explore and compare interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's (2005) model. A quantitative design was selected. The materials used in this study included 60 English management articles: 30 articles were written by Iranian Scholars and 30 by foreign scholars. They were selected through availability purposive sampling. After data collection, the introduction and literature review sections of the papers were investigated by the researchers in terms of the use of interactive meta-discourse markers (i.e., transitions, evidentials and code glosses) based on Hyland's (2005) model. Data analysis was conducted using descriptive statistics and Chi-square test. According to the results, in Iranian scholars' articles, the most frequent meta-discourse markers used in the introduction and literature review sections of the management articles based on Hyland's model were transitions and evidentials, respectively. In addition, the least frequent meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian scholars based on Hyland's (2005) model were code glosses. Regarding foreign scholars' articles, transitions were shown to be the most frequent meta-discourse marker used in the introduction section of the management articles based on Hyland's (2005) model. In the literature review section of the articles, the highest frequency was

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related to evidentials and transitions. It was also revealed that the least frequency was for code glosses in both the introduction and literature sections of the articles by foreign scholars. According to the results obtained from Chi-square test, the observed difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's (2005) model was statistically significant.

Keywords: Academic writing, introduction, meta-discourse, meta-discourse markers, literature review.

INTRODUCTION

Academic writing constitutes an inseparable part of higher education studies in almost all educational systems. Higher education and academic writing are tightly linked, and this has been taken into account by educationalists, applied linguists, etc. (Lea & Stierer, 2000). In the last three decades, the attention paid to academic writing worldwide has been increasingly grown as a result of the challenges from the globalization and internationalization of higher education, and English language education prominence (Lea & Stierer, 2000).

Moreover, typically, introduction and literature review form important parts of academic writings, including dissertations, theses, papers, research reports, research proposals, etc., whose purpose is to provide the background to and justification for the research undertaken. Introduction section, as the name shows, introduces the study, sets the scene and makes the reader familiar with the topic and purpose of the study. According to Ary, Jacobs and Sorensen (2010), in the introduction, the writer mentions the objective of the study and provides the reader with some background of the problem and the need for the study. Besides, the focus of inquiry is stated in the introduction as a question or a statement and the writer states how he or she became interested in the topic and how the question evolved.

The literature review is one genre requiring the author to justify the need for their own research via critically evaluating previously done research. It includes not only a statement of personal judgment but also an appeal to shared norms and values (Kwan, Chan, & Lam, 2012). In both these cases, the people who examine the theses will normally expect that the thesis will indicate a competent accomplishment of a literature review. The significance of the literature review is strengthened by Nightingale (1984) who proposed alternative styles of presentation of postgraduate research and shows that the work needs to be accompanied by a literature review. Evaluations of previous scholarship have a vital role in review of the literature of a research article by indicating how the boundary of an area of question can be further advanced by the author's work. However, for many inexperienced authors, evaluating others' work is a major challenge (Kwan, Chan, & Lam, 2012).

The two factors the present study is concerned with are meta-discourse and meta-discourse markers. As meta-discourse is concerned, "it is simply discourse about discourse or talk about talk" which can also be viewed "as the author's linguistic manifestation in a text". (Hyland, 1999, p. 5) Lee (2002) asserted that meta-discourse is one of the factors which is involved in generating coherence among many operational factors. To Hyland (2005), meta-discourse represents the idea that communication is not mere the exchange of information, goods or services, but it also embodies the personalities, attitudes and assumptions of those involved in communication. Hyland (2005) classified meta-discourse into two macro-categories, namely textual and

interpersonal. Textual meta-discourse which is the main concern of the present study organizes propositional information in a coherent way for a particular audience and a given context (Hyland, 2005).

And regarding meta-discourse markers, it can be argued that meta-discourse markers are used by the writers as devices to create coherent texts which are easily understandable for readers (Mirshamsi & Allami, 2013). Hyland (2005) divided meta-discourse into two broad categories: interactive and interactional. Interactive meta-discourse markers are “features used to organize propositional information in ways that the target reader should find coherent and convincing” (Hyland, 2005, p. 50). Interactional markers are those “features that draw the reader into the discourse and give them an opportunity to contribute to it and respond to it by alerting them to the writer’s perspective on propositional information and orientation and intention with respect to that reader” (Hyland, 2005, p. 52).

Review of the Literature

The Organization of Discourse

One of the key issues of discourse analysis is the organization of discourse, which refers to the sum of relations holding “between the units of text... and between each unit and the whole” (Goutsos 1997, p. 138).

Berzlanovich (2008) suggested three levels of discourse organization. They are cohesion, coherence, and genre. It is an easy task for a native speaker to differentiate a unified text from a collection of unrelated sentences. Basically a text, according to Halliday and Hasan (1976), is a passage of any length that forms a unified whole. However, what makes this distinction? In other words, is there any so-called device available that makes it possible for us to differentiate unified texts from otherwise? Prior to any attempt at making this distinction, one needs to have a better understanding of text.

At the ordinary level, people know cohesion as the simple and sustaining fact that some sentence sequences are logical and others are not (Halliday & Hasan, 1976). Cohesion turns a random collection of sentences into a text, and gives meaning, insight and purpose to those sentences. Without cohesion, the text cannot exist, because cohesion provides the textual means for starting comprehension or sense. Thus, cohesion is, according to Berzlanovich (2008), one of the features of a text contributing to the discourse organization. Discourse organization is the connectedness of the surface elements in the text. Taboada (2004) confirms the idea of the importance of inter-sentence cohesion and cohesion theory.

Taboada (2004) suggested presupposed and presupposing elements for cohesive ties. When the presupposed element is in the text, the reference type is endophoric. However, it is also likely that the presupposed element be found somewhere else; in that case there exists an exophoric reference. Reference is a context-bound concept; it is in direct limitations imposed on it by the culture, situation, setting, etc. From this perspective, then, the hanging together of a text, bound with the context of situation and culture, can be called coherence. “I used the word to refer to the property of ‘unity,’ of ‘hanging together.’ By this definition, any object is coherent to the extent that its parts hang together” (Hasan, 1984, p. 181). In general, “coherence is reserved for the hanging together of the text with something else outside itself, whereas cohesion is the internal hanging together of the text” (Taboada, 2004, p. 157).

Cohesion Theory and Language Learning

Research on Cohesion theory proves that it can be of a great value to language learning procedure. A few of these effective uses of cohesion theory will follow.

It is agreed that cohesion is useful to measure the effectiveness and quality of written text. Familiarity with different genres can have an enormous effect on writing quality of the learners in addition to having knowledge about the internal features of written texts. Dastjerdi and Samian (2011) reported that "A number of researchers have investigated the relationship between the use of cohesive devices and the overall quality of writing produced. However, the findings of these studies have been somewhat inconsistent or contradictory" (p. 66).

Olateju (2006) studied the SL learners' success in achieving cohesion in their writings through cohesive devices. Although the learners used some of the devices, some of the few used were wrong which made text comprehension difficult in its own right. Olateju (2006) concluded that the subjects lacked competence in their cohesive device use while they had been receiving intensive teaching English for six years.

Dastjerdi and Samian (2011) carried out a study on the use of cohesive devices in argumentative writing of Iranian English learners. They found out that the subjects had knowledge of cohesive devices and were capable of using them. However, some of the devices were wrongly used. The top most frequent devices were the lexical devices in the subjects' argumentative writings. The least, meanwhile, was conjunctions. They had reported that "Some researchers also maintain that lexical devices formed the largest percentage of the total number of cohesive devices, followed by references and conjunctions in students' writings" (Dastjerdi & Samian, 2011, p. 66).

Rostami Abu-Saeedi (2010) examined the most frequently utilized cohesive device used in EFL learners' writing. Surprisingly, he found that there was no significant difference between good and poor learners in the use of conjunctions. Also, it was revealed that both poor and good learners used additives, adversatives and causals as the most frequent cohesive device.

To study the use of cohesive devices in EFL learners' argumentative writing, Yang and Sun (2012) conducted a descriptive qualitative study. They found that participants had not used ellipsis and substitution in their writings. The researchers attributed this to learners' awareness of the inappropriateness of the use of these devices in formal writing. Ghasemi (2013) reviewed the existing literature on the usage of cohesive devices and the relationship between the number of cohesive devices and writing quality in EFL/ESL contexts. The main objective of this study was investigating cohesive devices used in essays written by EFL learners and examining the relationship between the use of cohesive devices and quality of their compositions. Data analysis indicated that the learners had used various cohesive devices in their writings. Furthermore, some cohesive problems were identified in learners' writings; the general pattern of cohesive devices in EFL/ESL learners' writings was identified.

Pourdana, Naziri and Rajeski (2014) attempted to examine the use of various kinds of cohesive devices in English Textbook and their effect on Iranian High school students' reading comprehension. Thus, a quasi-experimental pre-test post-test design was used. The researchers found that EFL learners benefited from high percentage of the use of cohesive devices in textbook. Also, it was reported that cohesive devices significantly influenced participants' reading comprehension.

Purpose of the Study

The purposes of the present study are as follows:

1. Identifying the most frequent interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian scholars based on Hyland's model.
2. Identifying the least frequent interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian scholars based on Hyland's model.
3. Identifying the most frequent interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by foreign scholars based on Hyland's model.
4. Identifying the least frequent interactive meta-discourse markers used in the introduction and literature review sections management articles written by foreign scholars based on Hyland's model.
5. Investigating whether there is a significant difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's model.

Methodology

The design of the research was quantitative. In the qualitative phase of the present study, the research made use of corpus-based content/document analysis design using Hyland's model to analyze the introduction and literature review sections of the management articles written by Iranian and foreign scholars. Generally, in a corpus-based content/document analysis design, the content of the texts is qualitatively analyzed for the recurring patterns and themes to be identified. In the recent years, this type of design has significantly contributed to research in education (Zanettin, 2013).

In the quantitative phase, the frequencies of interactive meta-discourse markers (i.e., transition, evidential, and code glosses) used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars were calculated. In addition, to check whether the difference between the frequencies of different meta-discourse makers in the introduction and literature review sections of the management articles written by Iranian and foreign scholars is significant statistically, Chi-square test was utilized.

Materials

The materials used in this study included 60 English management articles: 30 articles were written by Iranian Scholars and 30 by foreign scholars. They were selected through availability purposive sampling. It was availability in the sense that they were selected based on their accessibility to the researcher from the existing data bases. And it was considered as purposive because the researcher just selected articles written in different branches of the field of management. Indeed, the introduction and literature review sections of the papers were meticulously read line by line so as to identify interactive meta-discourse markers (i.e., transition, evidential, and code glosses) used in these sections based on Hyland's (2005) model.

RESULTS

Before presenting the results of data analysis, definitions of the interactive meta-discourse markers (i.e., transitions, Evidentials and Code glosses) are provided as follows.

Transitions have the role of expressing relations between main clauses (Examples: In addition, but, thus, and, etc.)

Evidentials refer to information from other texts (Examples: According to X, Z states, etc.)

Code glosses have the role of elaborating propositional meanings (Examples: Namely, e.g., such as, in other words, etc.)

Table 1 shows the frequency and percentage of the interactive meta-discourse markers used in the Introduction of the management articles written by Iranian scholars based on Hyland's model.

Table1. Frequency and Percentage of the Interactive Meta-discourse Markers in the Introduction of the Articles Written by Iranian Scholars

Meta-discourse markers	Frequency	Percentage
Transitions	150	51.02
Evidentials	96	32.65
Code glosses	48	16.32
Total	294	100

Table 1 shows that totally 294 cases of occurrence of the three interactive meta-discourse markers were identified in the Introduction of the management articles written by Iranian scholars based on Hyland's model. Out of these cases, 150 (51.2%) cases were transitions, 96 (32.65%) cases were evidentials and 48 (16.32%) cases were code glosses. Obviously, among the three types of the interactive meta-discourse markers, the most frequent meta-discourse marker was transitions with the frequency of 150 and the frequency percentage of 51.02. The second-most frequent meta-discourse marker was evidentials with the frequency of 96 and the frequency percentage of 32.65. The least frequent meta-discourse marker was code glosses, with the frequency of 48 and the frequency percentage of 16.32.

Figure 1 shows the bar graph of the frequency of the interactive meta-discourse markers used in the Introduction of the management articles written by Iranian scholars based on Hyland's model.

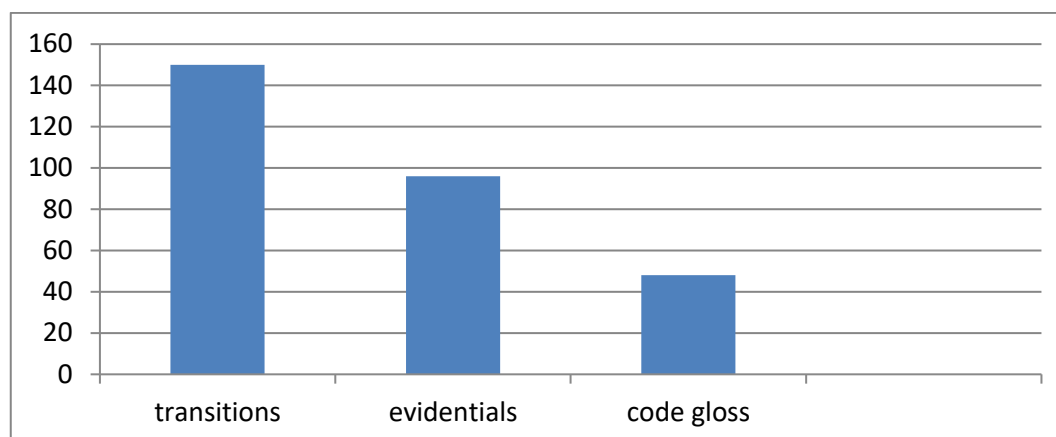


Figure 1. The Bar Graph of the Frequency of the Interactive Meta-Discourse Markers Used in the Introduction Section of the Management Articles Written by Iranian Scholars

Table 2 indicates the frequency and percentage of the interactive meta-discourse markers used in the literature review section of the management articles written by Iranian scholars based on Hyland's model.

Table 2. Frequency and Percentage of the Interactive Meta-discourse Markers in the Literature Review Section of the Articles Written by Iranian Scholars

Meta-discourse markers	Frequency	Percentage
Transitions	366	45.18
Evidentials	372	45.92
Code glosses	72	8.88
Total	810	100

According to the results shown in the table 2, total number of the occurrence of the interactive meta-discourse markers used in the literature review section of the management articles written by Iranian scholars based on Hyland's model was 810. Out of this, 366 meta-discourse markers were transitions, 362 were evidentials and 72 were code glosses. It is evident that the most frequent meta-discourse marker was evidentials. The frequency and percentage of this meta-discourse marker was 372 and 45.92, respectively. After evidentials, the most frequent meta-discourse marker was transitions with the frequency and percentage of 366 and 45.18. And meta-discourse marker with the lowest frequency was code glosses whose frequency and percentage were 72 and 8.88. Figure2 shows the bar graph of the frequency of the interactive meta-discourse markers used in the literature review section of the management articles written by Iranian scholars based on Hyland's model.

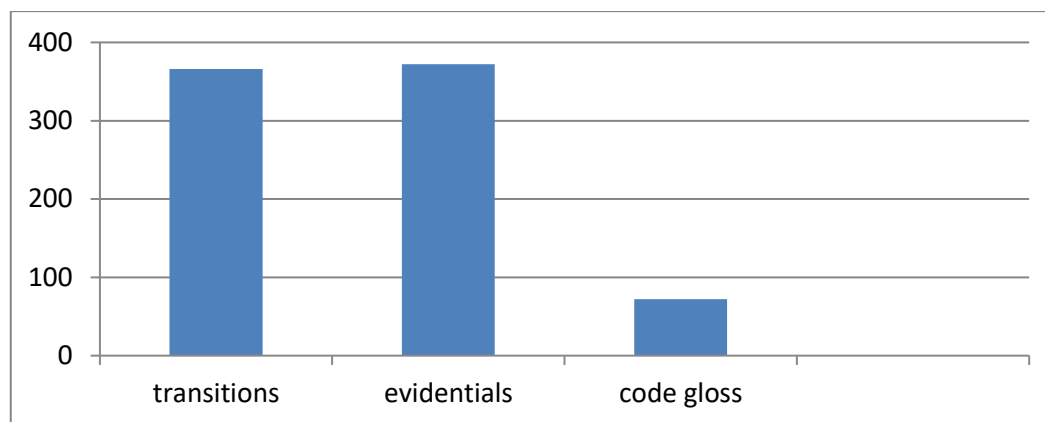


Figure 2. The Bar Graph of the Frequency of the Interactive Meta-Discourse Markers Used in the Literature Review Section of the Management Articles Written by Iranian Scholars

Table 3 shows the frequency and percentage of the interactive meta-discourse markers used in the introduction section of the management articles written by foreign scholars based on Hyland's (2005) model.

Table 3. Frequency and Percentage of the Interactive Meta-discourse Markers in the Introduction Section of the Articles Written by foreign Scholars

Meta-discourse markers	Frequency	Percentage
Transitions	41	62.12
Evidentials	15	22.72
Code glosses	10	15.15
Total	66	100

Referring to the table 3 we can see that totally there were 66 cases of occurrence of the interactive meta-discourse markers used in the introduction section of the management articles written by foreign scholars based on Hyland's model. Among these, 41 transitions, 15 evidentials and 10 code glosses were identified. Transitions were the most frequent meta-discourse marker the frequency and percentage of which were 41 and 62.12, respectively. The second most frequent meta-discourse marker was evidentials with the frequency and percentage of 15 and 22.72. And the least frequency was observed in the case of code glosses whose frequency and percentage were 10 and 15.15.

Figure 3 shows the bar graph of the frequency of the interactive meta-discourse markers used in the introduction section of the management articles written by foreign scholars based on Hyland's model.

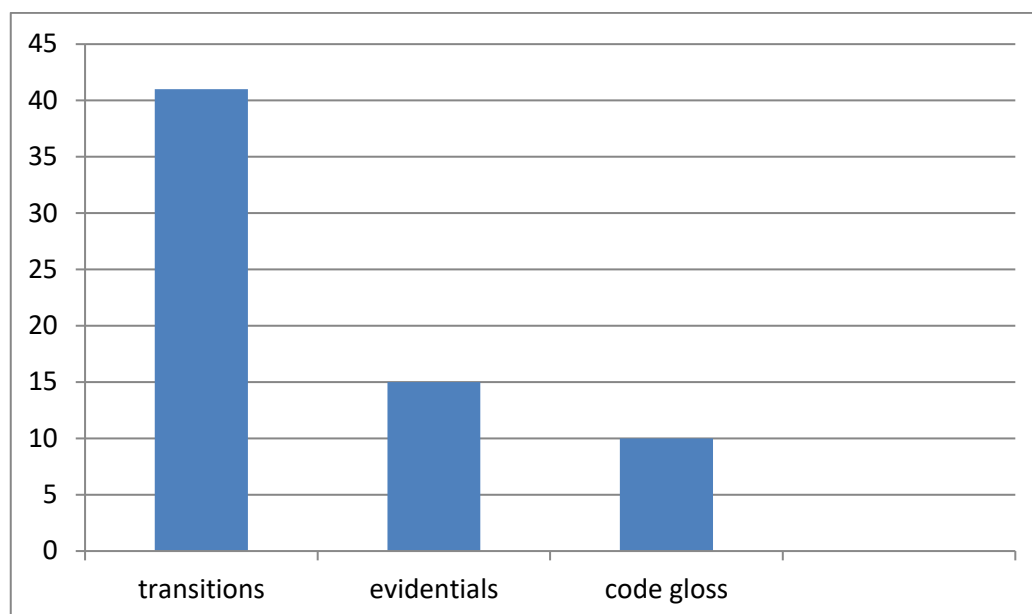


Figure 3. The Bar Graph of the Frequency of the Interactive Meta-Discourse Markers Used in the Introduction Section of the Management Articles Written by Foreign Scholars

Table 4 shows the frequency and percentage of the interactive meta-discourse markers used in the literature review section of the management articles written by foreign scholars based on Hyland's model.

Table 4. Frequency and Percentage of the Interactive Meta-discourse Markers in the Literature Review Section of the Articles Written by Foreign Scholars

Meta-discourse markers	Frequency	Percentage
Transitions	43	43
Evidentials	44	44
Code glosses	13	13
Total	100	100

As shown in the Table 4, the total number of the identified interactive meta-discourse markers in the literature review section of the management articles written by foreign scholars based on Hyland's model was 100. In particular, 43 transitions (43%), 44 evidentials (44%) and 13 code glosses (13%) were identified in the literature review section of the management articles written by foreign scholars based on Hyland's model. Obviously, the highest frequency was related to evidentials with the frequency and percentage of 44 and 44. The next most frequent meta-discourse marker was transitions with the frequency and percentage of 43 and 43. And code glosses were placed in the third rank with the frequency and percentage of 13 and 13.

Figure4 shows the bar graph of the frequency of the interactive meta-discourse markers used in the literature review section of the management articles written by foreign scholars based on Hyland's model.

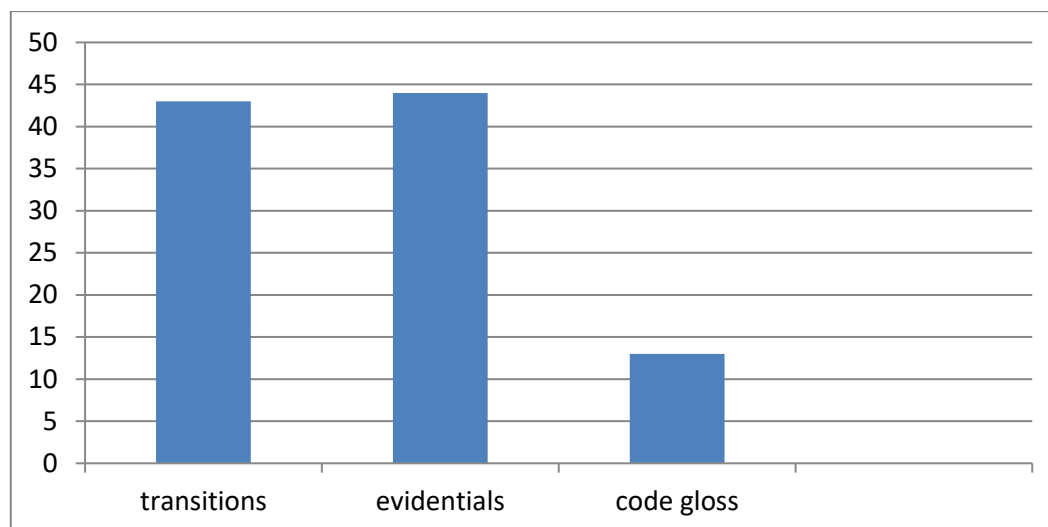


Figure 4. The Bar Graph of the Frequency of the Interactive Meta-Discourse Markers Used in the Literature Review Section of the Management Articles Written by Foreign Scholars

Here, to see whether there is a significant difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's model, a chi-square test was run which led to the following results:

Table 5. The results of Chi-square test

	Iranian & Foreign
Pearson Chi-Square	61.44
Asymp. Sig. (2-sided)	.000

Table 5 shows that the chi-square test for goodness of fit is significant ($\chi^2 = 61.44$, $p < .05$). Therefore, it can be said that there is a significant difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's model.

DISCUSSION

According to the results, the most frequent meta-discourse marker used in the introduction section of the management articles written by Iranian scholars based on Hyland's model was transitions. Besides, the most frequent meta-discourse marker used in the literature review section of the management articles written by Iranian scholars based on Hyland's model was evidentials. These results show that Iranian scholars paid much attention to showing relations between main clauses in the introduction section of their papers. Expectedly, the findings also mean that they cite information from other texts in the literature section of their papers.

It was seen that the least frequent meta-discourse marker used in the introduction section of the management articles written by Iranian scholars based on Hyland's model was code glosses. In addition, the least frequent meta-discourse marker used in the literature review section of the management articles was code glosses. These show Iranian scholars' lack of preference to elaborate propositional meanings in the introduction and literature review sections of the management articles. Transitions were shown to be the most frequent meta-discourse marker used in the introduction section of the management articles written by foreign scholars based on Hyland's model. Regarding the literature review section of the articles, the highest frequency was related to evidentials. However, there was minor difference between the frequency of evidentials and transitions and in deed it can be said the most frequent meta-discourse markers in the literature review section of the papers written by foreign scholars were evidentials and transitions. As implied by these findings, in the introduction section of the articles, foreign authors preferred to show relations between main clauses. And in the literature review sections, they preferred to show relations between main clauses and also cite information from other texts. Except the approximately the same frequency of evidentials and transitions, this pattern was also observed among Iranian scholars.

It was revealed that the least frequency was for code glosses in the introduction section of the articles by foreign scholars. And the same meta-discourse marker was identified as the least frequent one in the literature review section of the articles. According to the results obtained from Chi-square test, the observed difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's model was statistically significant. On the whole, Iranian scholars used more interactive meta-discourse markers in the introduction and literature review sections of the articles than their foreign counterparts.

One of the possible reasons for the findings of the present study is that by nature, literature review section requires more uses of evidentials than introduction section. In other words, citing information from others seems quite natural and expected in literature review section. However, the finding that foreign scholars made less use of meta-discourse markers including evidentials in literature review section in comparison with Iranian scholars may be attributed to their higher command of technical subject matter at hand, their knowledge background, their style of writing, their level of academic writing, etc. The other potential reason could be the role of cultural differences between English and foreign scholars. More specifically, inter-cultural differences proved to be affective in almost any aspect of learning and using a foreign language. Therefore, it is possible that here also they have played a role. Finally, the role of linguistic differences between English-speaking and Persian-speaking scholars' mother tongue can be enumerated as another reason for the findings. Last but not least, as a reason for low frequency of code glosses, scholars' lack of awareness of this type of meta-discourse marker can be mentioned.

The results are consistent with Bagheri, Biria and Shafiee's (2013) study which explored the frequency of textual meta-discourse markers in scientific English and Persian texts and showed that writers of the Persian books had used more textual meta-discourse markers. Also, the results are similar to the results of the study by Gholami, Tajalli, and Shokrpour (2014) wherein it was shown that there was a significant difference between the English and Persian texts regarding the frequency and types of meta-discourse markers in English medical texts and their Persian translation. Similarly, Ghahremani and Biria (2017) explored the use of meta-discourse markers in English research articles

written by Iranian writers according to Hyland's taxonomy. It was revealed that in the category of interactive meta-discourse markers, transitions and evidentials in social science articles were more frequently used. However, contrary to the present study, Yazdani and Salehi (2016) tried to deal with the differences between Persian and English in online headlines regarding the use of meta-discourse markers. It was indicated that there was no statistically significant difference between Persian and English online headlines regarding the use of meta-discourse markers in using meta-discourse markers. This difference between the results of this study and those of the previous studies can be that two different genres were investigated in the two studies.

CONCLUSION

As argued before, interactive meta-discourse markers are an important device to structure the text and contribute to textual cohesion as a valuable tool providing rhetorical effects in the text such as providing logic and reliance in the text (Mirshamsi & Allami, 2013). Writing in academic situations is an area wherein meta-discourse markers play an important role. However, it has been observed that students cannot make use of these devices in their writings. In the same vein, as put by Vyncke (2012), students lack the ability to perform well in their writings. Besides, through reviewing the existing literature, the researchers of the present study noticed a low amount of works on meta-discourse markers. These led them to conduct the present study. According to the results, regarding Iranian scholars' articles, the most frequent meta-discourse marker used in the introduction section of the management articles written by Iranian scholars based on Hyland's model was transitions. Besides, the most frequent meta-discourse marker used in the literature review section of the management articles written by Iranian scholars based on Hyland's model was evidentials. In addition, the least frequent meta-discourse marker used in the introduction section of the management articles written by Iranian scholars based on Hyland's model was code glosses. Moreover, the least frequent meta-discourse marker used in the literature review section of the management articles was code glosses. Regarding foreign scholars' articles, transitions were shown to be the most frequent meta-discourse marker used in the introduction section of the management articles written by foreign scholars based on Hyland's model. In the literature review section of the articles, the highest frequency was related to evidentials and transitions. It was also revealed that the least frequency was for code glosses in both the introduction and literature sections of the articles by foreign scholars. According to the results obtained from Chi-square test, the observed difference between the frequency of interactive meta-discourse markers used in the introduction and literature review sections of the management articles written by Iranian and foreign scholars based on Hyland's model was statistically significant.

Pedagogical Implications of the Study

As the first implication, the findings may give insights to stakeholders in the field including researchers, ELT teachers, and students about the status of using interactive meta-discourse markers in the management papers written by Iranian and foreign scholars. The second implication is that given that code glosses were shown to be the least frequent meta-discourse marker, it seems that in the educational settings more emphasis should be put on this type of meta-discourse marker by instructors as a way to increase awareness of students (as future scholars) of code glosses and their role in increasing the cohesion of articles. Another implication of the study is that writers should increase their knowledge of all types of meta-discourse markers and know that meta-

discourse markers are not specifically limited to transitions and evidentials and code glosses also contribute to text cohesion in an important way.

Suggestions for Further Research

Further research can be conducted to explore the reasons of using some meta-discourse markers than the other types through interviewing with scholars. The study can be replicated by investigating the pattern of using meta-discourse markers by Persian and foreign scholars in other fields of study. Replicating the study using other models of meta-discourse markers can also be an area for further research. A similar study comparing the use of meta-discourse markers in other sections of the articles including discussion, method and conclusion.

REFERENCES

- Abdi, R. (2011). Meta-discourse strategies in research articles: a study of the differences across subsections. *The Journal of Teaching Language Skills (JTLS)*, 30(1), 1-16. <http://dx.doi.org/10.22099/jtls.2012.391>
- Abdi, R. (2012). Evidence marking in research articles: An investigation of its sources and relative reliability through quality markers. *The Journal of Teaching Language Skills (JTLS)* 30(4), 1-26. <http://dx.doi.org/10.22099/jtls.2011.369>
- Ahour, T., & Entezari Maleki, S. (2014) . The effect of metadiscourse instruction on Iranian EFL learners' speaking ability. *English Language Teaching*, 7(10), 69-75. <http://dx.doi.org/10.5539/elt.v7n10p69>
- Akindele, O. (2008). *A critical analysis of the literature review section of graduate dissertations at the University of Botswana*. Retrieved from www.esp-world.info/Articles_20/DOC/GRADUATE_WRITING_site.pdf
- Amiryousefi, M., & Eslami Rasekh, A. (2010). Metadiscourse: Definitions, issues and its implications for English teachers. *Journal of Canadian Center of Science and Education*, 3(4), 159-167. <http://dx.doi.org/10.5539/jccse.v3n4p159>
- Ary, D., Jacobs, L. C. & Sorensen, C. (2010). *Introduction to research in education* (8th ed.). Orlando, FL: Harcourt Brace College Publishers.
- Babaii, E., Atai, M.R., & Mohammadi, V. (2016). Tracing meta-discursive stance over time and across disciplines : A comparative study of English research articles. *Issues in Language Teaching (ILT)*, 5(1), 83-106. <http://dx.doi.org/10.22054/ilt.2016.7727>
- Bagheri, J., Biria, R. & Shafiee, S. (2013). A sociopragmatic analysis of textual meta-discourse markers in English and Persian scientific texts. *International Journal of Foreign Language Teaching & Research*, 1(3), 100-121. Retrieved from <http://ensani.ir/file/download/article/1610955922-10329-99-23.pdf>
- Bal-Gezegina, B. (2016). A Corpus-based investigation of metadiscourse in academic book reviews. *Procedia - Social and Behavioral Sciences*, 232, 713 - 718. <https://doi.org/10.1016/j.sbspro.2016.10.097>
- Bernad-Mechó, E. (2015). A multimodal discourse analysis of linking metadiscursive elements in two opencourseware lectures (MOOCs). *Procedia - Social and Behavioral Sciences*, 212, 61-66. <https://doi.org/10.1016/j.sbspro.2015.11.299>
- Carrió-Pastor, M.L., & Calderón, R.M. (2015). A contrastive analysis of metadiscourse features in business e-mails written by non-native speakers of English. *Procedia - Social and Behavioral Sciences*, 173, 214 - 221. <https://doi.org/10.1016/j.sbspro.2015.02.055>
- Ebrahimi, S.J. (2018). The role of meta-discourse markers in comprehending texts of reading comprehension books published in Iran and Oxford University Press.

- International Journal of Applied Linguistics & English Literature*, 7(3), 90-96. <http://dx.doi.org/10.7575/aiac.ijalel.v.7n.3p.90>
- Estaji, M., & Vafaeimehr, R. (2015). A comparative analysis of interactional meta-discourse markers in the Introduction and Conclusion sections of mechanical and electrical engineering research papers. *Iranian Journal of Language Teaching Research*, 3(1), 37-56. <http://dx.doi.org/10.30466/ijltr.2015.20401>
- Ghadyani, F., & Tahririan, M.H. (2014). Interactional markers in English medical research articles written by Iranian and native authors: A contrastive meta-discourse analysis of method section. *Advances in Language and Literary Studies*, 5(4), 137-150. <http://dx.doi.org/10.7575/aiac.all.v5n.4p.137>
- Ghahremani, M., & Biria, R. (2017). Exploring interactive and interactional meta-discourse markers in discussion sections of social and medical science articles. *International journal of research in English education*, 2(4), 11-29. <http://dx.doi.org/10.29252/ijree.2.4.11>
- Ghasemi, M. (2013). An investigation into the use of cohesive devices in second language writings. *Theory and Practice in Language Studies*, 3 (9), 1615-1623. <http://dx.doi.org/10.4304/tpls.3.9.1615-1623>
- Gholami, M., Tajalli, Gh., & Shokrpour, N. (2014). An investigation of meta-discourse markers in English medical texts and their Persian translation based on Hyland's model. *European Journal of English Language and Literature Studies*, 2(2), 1-41. Retrieved from <https://www.eajournals.org/wp-content/uploads/An-Investigation-Of-Metadiscourse-Markers-In-English-Medical-Texts-And-Their-Persian-Translation-Based-On-Hylands-Model2.pdf>
- Halliday, M.A.K., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Hassen, R. (2015). Discourse as medium of knowledge: transmission of knowledge by transmission of discourse people live. *Journal of Education and Practice*, 6(1), 119-128. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1083383.pdf>
- Kawase, T., (2015). Metadiscourse in the introductions of PhD theses and research articles. *Journal of English for Academic Purposes*, 20, 114-124. <https://doi.org/10.1016/j.jeap.2015.08.006>
- Kwan, B. S. C., Chan, H., & Lam, C. (2012). Evaluating prior scholarship in literature reviews of research articles: A comparative study of practices in two research paradigms. *English for Specific Purposes*, 31 (3), 188-201. <https://doi.org/10.1016/j.esp.2012.02.003>
- Mardani, T. (2017). The impact of explicit instruction of metadiscourse markers on EFL learners' listening comprehension. *Journal of Teaching English Language Studies*, 5(3), 7-17.
- Mirshamsi, A., & Allami, H. (2013). Meta-discourse markers in the discussion/conclusion section of Persian and English master's theses. *The Journal of Teaching Language Skills (JTLS)*, 32(3), 23-40. <http://dx.doi.org/10.22099/jtls.2013.1706>
- Mkhitaryan, Y., & Tumanyan, S. (2015). On differences in the use of hedging in English and Armenian academic discourse. *Procedia - Social and Behavioral Sciences*, 197, 2506 - 2511. <https://doi.org/10.1016/j.sbspro.2015.07.324>
- Ofte, I. (2014). English academic writing proficiency in higher education: Facilitating the transition from metalinguistic awareness to metalinguistic competence. *Acta Didactica Norge*, 8 (2), 1-15. <https://doi.org/10.5617/adno.1142>
- Rostami Abu-Saeedi, A. A. (2010). Use of cohesive ties in English as a foreign language students' writing. *Iranian Journal of Applied Language Studies* 2, 137-156. <https://doi.org/10.22111/ijals.2012.65>
- Sarani, A., Khoshsima, H., & Izadi, M. (2016). Poring over meta-discourse use in discussion and conclusion sections of academic articles written by Iranian ESP

- students. *Journal of Research in Applied Linguistics*, 8(1), 133-145. <https://doi.org/10.22055/rals.2017.13846>
- Shi, W., & Han, J. (2014). Research on writing samples from the perspective of meta-discourse. *English Language Teaching*, 7(11), 151-158. <https://doi.org/10.5539/elt.v7n11p151>
- Tafaraji Yeganeh, M., & Ghoreyshi, S.M. (2015). Exploring gender differences in the use of discourse markers in Iranian academic research articles. *Procedia - Social and Behavioral Sciences*, 192, 684 – 689. <https://doi.org/10.1016/j.sbspro.2015.06.104>
- Tafaraji Yeganeh, M., Mellati Heravia, I., & Sawaria, A. (2015). Hedge and booster in newspaper articles on Iran's presidential election: A comparative study of English and Persian articles. *Procedia - Social and Behavioral Sciences*, 192, 679 – 683. <https://doi.org/10.1016/j.sbspro.2015.06.103>
- Tajeddin, Z., & Alemi, M. (2012). L2 learners' use of meta-discourse markers in online discussion forums. *Issues in Language Teaching (ILT)*, 1(1), 93-121. Retrieved from https://ilt.atu.ac.ir/article_116.html
- Tavakoli, M., Dabaghi, A., & Khorvash, Z. (2010). The effect of meta-discourse awareness on L2 reading comprehension: A case of Iranian EFL learners. *English Language Teaching*, 3(1), 92-102. <https://doi.org/10.5539/elt.v3n1p92>
- Vyncke, M. (2012). *The concept and practice of critical thinking in academic writing: an investigation of international students' perceptions and writing experiences*. (Master's Thesis) King's College, London. Retrieved from https://www.academia.edu/29836342/The_Concept_and_Practice_of_Critical_Thinking_in_Academic_Writing_An_Investigation_of_International_Students_Perceptions_and_Writing_Experiences
- Wei, J., & Gong, Y.T. (2016). Studies on meta-discourse since the 3rd millennium. *Journal of Education and Practice*, 7(9), 194-204. Retrieved from files.eric.ed.gov/fulltext/EJ1095757.pdf
- Yang, W., & Sun, Y. (2012). The use of cohesive devices in argumentative writing by Chinese EFL learners at different proficiency levels. *Linguistics and Education*, 23, 31-48. <https://doi.org/10.1016/j.linged.2011.09.004>
- Yazdani, A., & Salehi, H. (2016). Meta-discourse markers of online texts: English and Persian online headlines use of meta-discourse markers. *International Journal of Education & Literacy Studies*, 4(3), 41-46. <https://doi.org/10.7575/aiac.ijels.v.4n.3p.41>