Discourse Markers in Argumentative and Expository Writing

Of Iranian EFL Learners

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Abstract

The aim of the present study was to investigate the frequency and the type of discourse markers used in the argumentative and expository writings of Iranian EFL learners and the differences between these text features in the two essay genres. The study also aimed at examining the influence of the use of discourse markers on the participants' writing quality. To this end the discourse markers used in two essays (an argumentative and an expository) written by the participants of the study were analyzed. The results indicated a hierarchy of use of discourse markers in both essay types with elaborative markers (mainly "and") the most frequently connectors used in both essay types. Next came contrastive and inferential markers; reason, exemplifier, and conclusive markers, respectively, were the least frequently used connectors. The results, moreover, indicated that, on the whole, the mean of discourse marker use was significantly higher in argumentative essays than in expository essays. As for discourse marker categories, contrastive and conclusive markers were used more frequently in argumentative than in expository essays. The results, nonetheless, showed that the use of discourse markers cannot be a significant predictor of the writing quality in argumentative and expository compositions of Iranian undergraduate EFL students.

Keywords: Argumentative, Discourse marker, Essay, Expository, Quality, Writing

1. Introduction

The production of a coherent piece of discourse is an interactive process that entails speakers and/or writers to draw upon different types of communicative knowledge in addition to the grammatical knowledge (Sanders and Noordman, 2001). Communicative knowledge is pertinent to expressive and social ability, i.e. the ability to use language to show one's personal and social identities, attitudes, actions, and to establish interpersonal relationships between participants involved in discourse. Other forms of knowledge, on the other hand, are related to the cognitive ability to represent concepts and ideas through the medium of language and to textual ability, which help us to organize forms, and convey meanings in the extended discourse (Schiffrin, 2001).

Discourse markers (DMs, hereafter) are a group of linguistic items functioning within cognitive, expressive, social, and textual domains (Schiffrin, 2001). Theoretically speaking, DMs are verbal and, at times, non-verbal devices which contribute to the integrity of the discourse (Schiffrin, 1987). As far as writing is concerned, DMs help us produce an effective and satisfactory piece of writing and, in fact, play a facilitating role in communication; hence, the lack or inappropriate use of DMs in an L2 would hinder successful communication or might lead to the lack of comprehension. In fact, L2 writers must learn that the reader would be able to follow the ideas expressed in the text more easily if they signal the relations of their utterances to those which precede and follow. Therefore, DMs constitute an important component of communicative competence, which L2 learners must acquire if they want to communicate effectively. This implies that the nonnative speakers competent in using the DMs of the L2 will be more successful in interaction than those who are not.

DMs have been studied in various branches of applied linguistics and in a variety of languages like Chinese, Danish, Finnish, French, German, Hebrew, etc. They have also been examined in a variety of genres, such as descriptive (Jalilifar, 2008), political interviews (Wilson 1993), health care consultations (Heritage and Sorjonen, 1994), tutorial sessions (Moser and Moore 1995), newspapers (Cotter 1996a), radio talk (Cotter 1996b), and classroom (Chaudron and Richards, 1986).

One interesting and important area of research in second language writing is to see how DMs are used by L2 student writers of English. Nonetheless, in L2 writing research not enough is known about the patterns of DMs used by L2

student writers in different writing genres and if there is a link between the use of these markers and the quality of the text produced by EFL learners. To shed light on these issues, this study is an attempt to scrutinize into the way Iranian EFL learners use DMs in the expository and argumentative texts they write, in order to see which DMs and with what frequency are used to maintain text coherence and establish relations between different parts of the text.

2. Literature review

Research on DMs can be classified into three main categories. The first group of studies have examined the frequency of DMs used in the students' writing. Some of these studies have investigated the use of DMs in one language (L1 or L2) and some others have compared the frequency of the use of DMs between L1 and L2. For instance, Connor (1984) compared six argumentative essays written by English native and ESL students, following Halliday and Hasan's (1976) framework. No significant difference was found between native and ESL students in the frequency of the use of DMs.

Field and Yip (1992) compared the writings of 67 Hong Kong students with 29 Australian students on an argumentative topic. They found that non-native students of English used more conjunctions than Australian students did, and they usually put all conjunctions at the beginning of the sentences.

In a similar study, comparing the frequency of DMs used by native and non-native speakers of English, Karasi (1994) analyzed 135 expository essays by Singaporean secondary students. They found no difference between native and ESL students in the frequency of the use of cohesive ties.

Intraprawat and Steffensen (1995) analyzed the DMs used in persuasive essays by ESL university students. They found that differences between essays that received good ratings and essays that received poor ratings were found in the number of words, T-units, and density of DMs. That is, the former was characterized by a high density of these features.

Steffensen and Cheng (1996) analyzed argumentative texts written by students who worked on the propositional content of their essays and who were taught using a process approach and those who concentrated on the pragmatic functions of DMs by enjoying direct teaching of DMs. The results showed that students receiving direct instruction on DMs used them more effectively and also became more sensitive to their readers' needs, thereby making global changes that improved their papers.

Jalilifar (2008), following Fraser's (1999) taxonomy of DMs, investigated DMs in descriptive compositions of 90 junior and senior Iranian EFL students. Findings showed that elaborative markers were the most frequently used, followed by inferential, contrastive, causative, and topic relating markers. A direct and positive relationship was also found between the quality of the compositions and the number of DMs used.

The second group of studies have investigated the nature of DMs used in students' writing. Liu and Braine (2005), using Haliday and Hassan's taxonomy of cohesive devices, investigated the use of cohesive devices in 50 argumentative compositions written by Chinese undergraduate non-English majors. They also examined the relationship between the number of cohesive devices used and the quality of writing. Among the sub-categories of conjunction devices, additive devices accounted for the largest percentage of use, followed by causal, temporal, and adversative devices. The cohesive items with the highest frequency were 'and', 'also' and 'or'. Among adversative devices, 'but' was used with the highest frequency, while 'on the contrary', and 'instead' occurred very little in their writings. Other items such as 'as a result', and 'thus' were rarely used.

Hu et al. (1982), using frequency counts, analyzed the use of cohesive ties by 12 Chinese university students in comparison with 12 Australian university students. The framework used was Halliday's functional grammar. They found that Chinese students used more conjunctions and Australian students used more lexical cohesion.

Using an 8 million-word corpus of fiction, news, and academic spoken and written English, Bell (2010) examined the contrastive DMs of 'nevertheless', 'still' and 'yet'. The results showed that these markers constituted a cline of scope with 'nevertheless' having the most limited scope and 'yet' having the largest scope. Variability of scope refers to "the extent to which a marker instructs the hearer/analyst to search the previous discourse or even go beyond the discourse to search their encyclopedic knowledge for a potential effect" (Bell, 2010, p. 1925).

Hays (1992), investigating the use of different types of DMs by Japanese learners of English in their first, second, or third year of study, found that while DMs 'but', 'and', and 'so' were used frequently, very few learners used 'well' and 'you know'. Hays speculates that there is a developmental order for the acquisition of DMs. That is, the DMs which are on the ideational plane are taught and used first while those that are more pragmatic appear later in the subjects' speech. This idea is supported by Trillo's (2002) corpus-based study comparing DM usage between native speakers and learners of English. Trillo showed that learners of English used the DMs 'well' and 'you know' (among others) much less frequently than native speakers and that when learners used these lexical items, they were much more likely to be in

their ideational, non-pragmatic usages.

On the other hand, a study by Muller (2004) suggested different patterns of DM usage for German learners of English. This study was based on the retellings and discussion of a short film by American native English speakers and German learners of English. She found overuse of the functions of some markers like 'well' by German learners of English. She suggested that this 'over-use' is a result of the way that the DM 'well' is presented in textbooks that these German students of English had used.

The last group of studies reviewed here have investigated the relationship between DMs and writing quality. Allard and Ulatowska (1991), in a study using Halliday and Hasan's (1976) framework, investigated the writings of 30 fifth-grade children who were native speakers of English. They found a high correlation between the number of lexical ties and writing quality. Narrative and procedural texts were used and it was found that for narratives, but not for procedural text types, cohesive harmony was more strongly correlated with writing quality. Finally, there were marked differences in cohesive properties across discourse types.

Zhang (2000) focused on the use of cohesive features in the expository compositions of Chinese undergraduates. He collected one hundred and seven essays from two Chinese universities. Halliday and Hasan's (1976) taxonomy of cohesive devices and their framework for analysis were used. Students employed in their writing a variety of cohesive devices with some categories of ties used more frequently than the others. Lexical devices were the most frequently used, followed by conjunctions and reference devices. There was no statistically significant relationship between the number of cohesive ties employed and the quality of writing. Certain cohesive features were identified in the expository writing of Chinese undergraduates which included overuse and misuse of conjunctions and restricted use of lexical cohesion.

To investigate the relationship between the number of cohesive devices in   argumentative compositions by Chinese undergraduate EFL learners and their writing quality, Liu and Braine (2005) conducted a correlational analysis between the numerical composition scores and the frequency of use of cohesive devices per composition in terms of their categories (reference, conjunction, and lexical cohesion). The results demonstrated that the composition scores significantly co-varied with the total number of cohesive devices. The composition scores were highly correlated with lexical devices among the three main categories of cohesive devices.

Furthermore, Johnson (1992) analyzed 20 expository essays in Malay with 20 essays in English by the same group of Malay students, and 20 essays in English by native speakers. There was no difference in the degree of cohesion between ''good'' and ''weak'' compositions written in Malay by native speakers or in English by native and Malay speakers.

Results of the above studies, in general, suggest that L2 learners underutilize DMs (compared with native speaker use) especially for their pragmatic functions. While the majority of these studies have compared DMs in L1 and L2, very few have examined the use of these DMs used in L2 only and in two different essay genres. In addition, the relationship between the use of DMs and writing quality is an issue that has not been attended to adequately and needs to be investigated particularly in an EFL context.

In an attempt to address the above-mentioned issues, the present study aims at identifying the use of DMs in academic argumentative and expository compositions of Iranian university students. The study, moreover, intends to analyze the effect of using DMs on the quality of writing. The results of this research will provide us with insights into the general pattern of DMs use in university EFL learners' academic writing. This would help us identify our students' problems in using DMs, e.g. overuse or underuse of certain categories of DMs, and, thereby, modify our writing teaching procedures and incorporate a more precise plan for teaching the appropriate use of DMs.

3. Objective of the Study

As mentioned above, this study intends to identify the use of DMs in academic argumentative and expository compositions of Iranian university students. The study also intends to compare the frequency and type of DMs used in the two essay types. Finally, the present study will analyze the effect of using DMs on the quality of writing.

4. Research Questions

The study, thus, aims to answer the following questions:
1. What is the overall frequency of the use of individual DMs and their relevant categories in argumentative and expository texts produced by Iranian undergraduate EFL students?
2. Is there a significant difference between the DMs used in argumentative and expository texts?
3. To what extent does the use of DMs influence the quality of the argumentative and expository essays?

5. Theoretical Framework of the Study

The present study builds upon Fraser's (1999) taxonomy of DMs categories. This taxonomy, as compared to the similar taxonomies of DMs, is mainly used for the classification of written discourse and seems to be the most comprehensive classification in written discourse. According to Fraser (1999), DMs are defined as a pragmatic class, lexical expressions drawn primarily from the syntactic classes of conjunctions, adverbials, and prepositional phrases. With certain exceptions, they signal a relationship between the interpretation of the segment they introduce, S2, and the prior segment, S1. They have a core meaning, which is procedural, not conceptual, and their more specific interpretation is ´negotiated` by the context, both linguistic and conceptual. Based on this model, there are two types of DMs: those that relate aspects of the explicit message conveyed by S2 with aspects of a message, direct or indirect, associated with S1; and those that relate the topic of S2 to that of S1. Fraser's (1999) taxonomy includes six main subclasses. These subcategories are presented below:

1. Conclusive DMs: In sum, In conclusion, To sum up, etc.

2. Reason DMs: Because, Since, Du to, etc.

3. Elaborative DMs: And, Also, Moreover, In addition, etc.

4. Contrastive: But, However, Although, etc.

5. Inferential: Thus, Hence, So, Therefore, etc.

6. Exemplifiers: For example, Such as, For instance, etc.

6. Methods

6.1 Participants

The initial sample consisted of 56 Iranian English majors (25 males and 31 females, all seniors) who took part in two intact classes (one class consisted of 31 students and the other 25) of an essay writing course at Shiraz University, Iran. They had all passed two pre-requisite grammar courses as well as a course in paragraph writing.

In order to ensure the homogeneity of the group and control the proficiency level an Oxford Placement Test was given to all the participants. The majority of the students (N=47) were ranked as intermediate; the mean calculated for this group was 42.12, indicating an intermediate level according to the interpretation provided by the test manual. The rest were either lower or higher with respect to their proficiency level. Only the essays of those standing at the intermediate level were analyzed for the present study.

6.2 Materials and instruments

The materials used in the present study consisted of the argumentative and expository essays written by the participants of the study. Totally, the students wrote three argumentative and three expository essays; the third essay from each text type was selected to be analyzed for the present study. The reason was that the third essay was written after the students had practiced writing one expository and one argumentative essay in groups and two individual expository and two argumentative ones. The last essay from each genre was, hence, assumed to be the best one in terms of quality.

The first instrument of the study, as mentioned above, was the Oxford Placement Test used to ensure the homogeneity of the participants of the study. The reliability index for the scores obtained though this test, as calculated by KR-21 method, was 0.88.

In addition, Ashwell's (2000) content scoring scheme was used to evaluate the quality of the essays. This is a multifaceted scheme that evaluates writing quality based on such aspects as writing organization, the smooth flow of the ideas, use of appropriate transitions, etc.

6.3 Procedure

Since the purpose of the Essay Writing course was introducing the students to two types of essays, i.e. expository and argumentative, commonly used in academic writing, for each essay type, three sessions were assigned to teaching the students the process of writing expository and argumentative essays. Then, each participant was required to write essays of between 250 to 270 words about the assigned topics. Then, the written essays were collected by the researcher, reviewed, scored, and given back to the students. This process took five sessions for each essay type. As a part of the course, like any writing course, in two sessions, the use of different kinds of DMs and their importance were explained in class and the students practiced using DMs in their writing.

As mentioned before, the students wrote three argumentative and three expository essays, but only the last essays of each text type were considered as data required for this study. The topic of the expository essay was "*What are the main*

causes of brain drain in developing countries?", and that of the argumentative essay, "*Computers have made the life more difficult. Do you agree or disagree with this idea?*"

The essays were reviewed by the researcher with regard to two aspects. First, the DMs used in the essays were tallied for later analysis. In addition, the essays were scored with respect to their quality. In order to ensure the reliability of scoring, 20% of the essays were scored by the researcher and an experienced university professor and then the inter-rater reliability of the scores was estimated through Chronbach's Alpha formula for inter-rater reliability; the obtained reliability index was 0.75, which is an acceptable reliability index. Then the rest of the essays were scored by the researcher, himself.

6.4 Data analysis

In order to answer the first question regarding the frequency of the use of DMs, the frequency of the overall DMs used in each essay type were calculated. Then the frequencies were turned into percentages to have a clearer picture of the use of individual DMs used in each essay type. Then, the DMs were classified with respect to the category of the cohesive devices they belonged to. This time the mean scores of the use of DMs belonging to different categories were calculated. This allowed the researchers to statistically compare the use of different categories of DMs across different text types.

Then, in order to compare the use of these categories within and across the two text types, the means of the use of these categories were compared using repeated measures test of ANOVA and paired t-test, respectively.

Finally, multiple regression analysis was run to investigate the extent to which different categories of DMs would predict the quality of the two essay types.

7. Results

7.1 Overall use of individual DMs in each essay type

As mentioned above, the number of individual DMs used in the two essay types were tallied and turned into frequencies. Table 1 presents the frequencies and the percentages of the use of individual DMs on the whole and in each essay type

<Table 1 about here>

Overall, 15 different forms of DMs have been used by Iranian undergraduate EFL learners. As can be seen, around 2150 occurrences of different categories of DM forms were found across both argumentative and expository texts written by Iranian undergraduate university students. Furthermore, it can be seen that the overall frequency of the use of these markers is to some extent higher in argumentative essays (1176 occurrences) than in expository assays (965 occurrences). A closer look at the overall individual occurrences of each of the DMs demonstrates that the most frequently used DM in all assays is the elaborative marker 'and' with an overall frequency of 1227 across both text types. In terms of rank order of use, other more frequently used DMs were 'or', 'so', ' but', ' also', 'for example', and ' because' respectively.

7.2 Use of different categories of DMs across text types

The means for different categories of DMs were calculated to be compared across different text types and categories. As mentioned before, the DM categories selected for analysis were based on Fraser's (1999) classification which includes the following DM types and examples used by the participants of the study:

1. Conclusive DMs: In sum

2. Reason DMs: because

3. Elaborative DMs: and, also, moreover, or

4. Contrastive: but, however, although

5. Inferential: thus, so, therefore

6. Exemplifiers: for example, such as

The descriptive statistics for the mean occurrence of each discourse marker category is presented in Table 2.

<Table 2 about here>

As Table 2 shows, the participants made use of elaborative markers (mean=32.68) most of all, followed by inferential (mean=4.68), contrastive (mean=4.40), exemplifier (mean=1.78), reason (mean=1.48) and finally conclusive markers (mean=.38). The results reveal a hierarchy of use of DM categories across expository and argumentative texts. That is, in terms of rank order of use, the mean use of elaborative, contrastive, and inferential markers respectively in argumentative texts is the highest followed by reason, exemplifier, and conclusive markers, respectively. In expository

texts, in terms of ranking of use, the mean use of elaborative, inferential, and contrastive was the highest followed by exemplifier, reason, and conclusive DMs. This demonstrates that there is a text-type specific hierarchy of use of DMs.

To find out the differences among individual categories of DMs across all assays, argumentative essays, and expository essays are significant, three repeated measures tests of ANOVA were conducted. The results are presented in Table 3.

<Table 3 about here>

The results show that the participants' use of the six categories of DMs are significantly different in all the three cases (F=297.27, p<0.05 for all; F=194.88, p<0.05, for argumentative essay; and F=194.45, p<0.05, for expository essay). To see where these significant differences lie, *post hoc Bonferroni tests* were applied. The results revealed that for all the cases (all essays, argumentative essays, and expository essays) elaborative DMs were used significantly more frequently than all the other categories and the means of inferentials and contrastives, too, were higher than the other categories.

7.3 Differences between DMs used in argumentative and expository essays

To find out whether the differences between the overall frequencies of the use of all DMs across the two different text types were statistically significant or not, paired samples t-test analysis was conducted. The results are presented in Table 4.

<Table 4 about here>

As the table illustrate, in three cases the differences are significant: the difference between all DMs in argumentative and expository essays (t= 3.01, p <0.001); the difference between contrastive DMs in the two essay types (t=3.60, *p* <0.001); and the difference between conclusive DMs (t=1.94, *p* <0.05). As it is evident in the table, in all these cases, DMs are used more frequently in argumentative essays than in expository ones.

7.4 Effect of using DMs on writing quality

In order to investigate the extent to which the use of DMs can influence expository and argumentative writing quality, two tests of Multiple Regression Analysis were run. The results are presented in Table 5.

<Table 5 about here>

As illustrated in the table, the results indicate that the use of DMs in argumentative and expository essays does not significantly predict the quality of the essays.

8. Discussion and Conclusion

This study attempted to examine the features of argumentative and expository compositions written by Iranian undergraduate EFL university students in terms of using DMs. Furthermore, the present study intended to investigate the effect of using DMs on writing quality. To this end, DMs used in two types of essays, i.e., expository and argumentative, written by a group of Iranian EFL learners were examined.

The results of the study showed that elaborative DMs were the most frequently used cohesive device in both argumentative and expository texts. The means for the use of these markers (17.59 for argumentative essays and 17.12 for expository essays) turned out to be much higher than those of the other DMs. These results are in line with those of other studies showing that elaborative DMs are the most frequently used cohesive devices (Jalilifar, 2008; Johnson, 1992). This might imply that the use of elaborative DMs is more closely related to expository and argumentative compositions than other DMs. The most commonly used elaborative DMs in both text types were 'and', 'also', 'moreover', and 'or', among which 'and' was used in a significantly higher quantity than other markers; five times more than 'or' and 15 times more than 'also' and more than 60 times the use of 'moreover'.

The extensive use of elaborative markers may also be due to the fact that both expository and argumentative writing in general require explanation of ideas, which depends to a large extent on the use of elaborative markers to establish a kind of parallel relationships between different sections of the written discourse. The results might also imply that Iranian students tend to include a large number of ideas while writing about a topic rather than elaborating on and discussing certain ideas. This entails using more elaborative DMs than the other DMs types.

The results are also in line with the research on the use of such markers in expository and argumentative texts (Zhang, 2000; Martinez, 2004). For instance, Chang's (2000) study of cohesion indicated overuse of additive markers like 'also', 'besides', and 'in addition'. As Murray (1990) contends, it is also possible that EFL students' extensive use of elaborative markers is due to the fact that they are exposed to such markers in their own native language and in the English textbooks they read.

Moreover, the results showed that there is a hierarchy of use of DMs categories across expository and argumentative

texts. That is, in terms of rank order of use, the mean use of elaborative, contrastive, and inferential markers, respectively, in argumentative texts is the highest followed by reason, exemplifier, and conclusive markers, respectively. In expository texts, more or less, the same order can be observed; that is, the mean use of elaborative, inferential, and contrastive categories was the highest followed by exemplifier, reason and conclusive markers, respectively. As Werlich (1982) argues, different text genre require different relationships between the ideas; for instance, description entails cognitive properties of interrelation and differentiation of perceptions in space, while narration requires relationship in time; or, exposition involves comprehension of general concepts through differentiation by analysis or synthesis, while argument needs evaluation of the concepts through extraction of similarities, contrasts, or transformations. This means that different text types do not necessarily cohere in the same way and require different textual links given the type of macrostructure they have (i.e. whether they are expository or argumentative in nature). Accordingly, we should expect to find different proportions of use of such markers in different texts as we found in this study.

An overall analysis of the differences among all categories of DMs showed significant differences amongst all the different categories except for the differences between exemplifier versus reason, and contrastive versus inferential DMs. A more detailed analysis of the differences among all categories of DMs within each text type also showed a similar pattern of difference. That is, the differences amongst almost all the categories of DMs within both expository and argumentative text types were found significant. Furthermore, a similar pattern of the lack of difference to that of the overall analysis was also found across both text types. In other words, no significant differences were found between contrastive versus inferential, and exemplifier versus reason DMs across the two text types. Given that the mean use of these markers is rather low in both text types, it can be argued that Iranian undergraduate students have more difficulty with the use of these markers in comparison with other DMs.

One can argue that developing certain logical relations between segments of discourse may be a linguistic aspect as well and entail more knowledge and experience with the language. Complex backward search and assessment of the meaning of surrounding content, and evaluating the relations between and among propositions (which is achieved through using contrastive, reason or inferential markers in expository and argumentative texts) is much more demanding than does the additive relations (Goldman and Murray,1992; Vonk and Noordman, 1990). Accordingly, lower use of such textual devices in the students' writings in the present study was observed.

The results of the study, in addition, showed that there is a significant difference between the mean use of individual categories of DMs across argumentative and expository texts with a higher use of DMs in argumentative essays than in expository ones. This finding is indicative of the idea that undergraduate EFL learners tend to resort to more textual and discoursal devices in argumentative texts than in expository texts to get their messages across or prove their arguments and make it more convincing to the reader. Further analysis of the differences between individual categories between the two text types demonstrated no significant difference between similar categories of DMs across expository and argumentative texts except for the differences between contrastive and conclusive DMs. That is, contrastive and conclusive DMs were used significantly more in argumentative text types in comparison with their corresponding use in expository texts. This can be due to the cognitive and rhetorical nature of the argumentative text type. That is, the production of argumentative text involves a cognitive and rhetorical process of problem-solving (Tirkonnen-Condit, 1994). As Tirkonnen-Condit (1994) argues, the process of written argumentation typically has the following structural units: situation, problem, solution, and evaluation. The situation introduces background material; the problem is a statement and undesirable condition of things, while the solution is a statement of the desirable condition and is often followed by an evaluation.

Argumentative texts entail expressing an opinion and trying to persuade the reader by providing reasons for your argument and, at the same time, presenting the opposing view and refuting it. It deals with the mental process of judging. "Argumentations can be analysed in terms of the signals of the writer's attitudes and judgement and the argumentative procedures adopted, whether inspired by logical deduction, or inductively based on facts or examples, or simply derived on an analogical basis" (Abdollahzadeh, 2009, p. 12). All argumentative texts promote or evaluate certain beliefs or ideas with conceptual relations such a reason, significance, or opposition frequently. It seems that in argumentative texts evaluating the opposing theme and holding it against the writers' main argument and finally making conclusive arguments requires heavier use of contrastive and conclusive DMs. As a result, to be more rhetorically effective, undergraduate students resort to these markers to make their points more convincing, argumentative, and evaluative in nature. Consequently, the use of such markers is significantly more prevalent in argumentative texts than in expository ones.

Finally, results of the study revealed that the use of DMs cannot be a significant predictor of the writing quality in argumentative and expository compositions of Iranian undergraduate EFL students. This finding goes against studies which report high correlation between DMs use and overall writing quality (Hartnett, 1980; Jalilifar, 2008; Martinez

(2004); Witte and Faigley, 1981). Of course, the findings in the literature as to the relationship between writing quality and discourse marker use are mixed. For instance, Johnson (1992) found no differences in the amount of cohesion between "good" and "weak" compositions written in Malay by native speakers or in English by Malay speakers. However, it should be noted that in studies on the strong correlation between DM use and writing quality, cohesion was defined both in terms of syntactic and lexical cohesion. Most of these studies found that high rated essays contained more lexical collocation and lexical reiteration (Witte and Faigley, 1981; Lieber, 1980). In fact, two thirds of the cohesion in the study by Witte and Faigley (1981) were lexical. Similarly, Anderson (1980) found that there is a tendency to use lexical reiteration and not to use DMs or reference in both oral and written narratives.

Comparing the results of the present study with the findings of the above-mentioned studies, one can argue that the text quality cannot be a function of just the use of DMs. Rather, other elements (e.g., lexical reiteration, collocation pattern, reference, etc.) add to the coherence and quality of the texts. Furthermore, this relationship can be a function of the type of the text and whether the writer of these texts is a native speaker or an ESL/EFL writer. For example, Jalilifar (2008) found a significant relationship between DMs use and writing quality in descriptive texts by postgraduate and graduate EFL students, while Johnson (1992) found no such a relationship in the expository writings of native speakers of English. Therefore, further research is needed with both native and non-native English writers at different levels of language proficiency writing different types of texts to corroborate the findings of this study.

9. Pedagogical Implications

The present study can have a number of pedagogical implications. The findings of the present study showed that the Iranian students do not use a wide range of DMs and that they use some particular elaborative markers like "and" in a significantly higher manner than other markers. This rather overuse of 'and' can be a sign of weakness on the part of these learners in their writings. This implies that teachers can work more on incorporating the use of DMs in their teaching. In other words, teachers need to raise the students' awareness of textual norms of practice and sensitize them to the use of particular devices and their frequency of use in particular types of texts. This way, the student would learn how to produce texts which have different purposes and structures, and which types of DMs are more commonly used in which particular text types, when writing in English.

In addition, the lack of the relationship between writing quality and DM use can imply that the use of DMs has not been done appropriately and purposefully by undergraduate EFL learners. Thus, teachers can work not only on the quantity of cohesive devices but also on their quality. They would need to raise the students' awareness of the appropriate use of individual categories of DMs and how they can be used in creating a coherent text. They would also need to let the learners realize that DMs are not the only textual devices which can add to the quality of a text. Rather, there are other elements in addition to DMs (like the use of reference, ellipsis, substitution, etc.) that can make a text more cohesive and thus add to the quality of the texts.

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Table 1. Frequency and percentage of DMs

DMs	All	Argumentative	Expository
And	1227/57.2%	663/31%	565/26%
Or	219/10.22%	101/4.7%	118/5.52%
Thus	25/1.7%	21/1%	4/0.7%
But	150/7%	86/4%	66/3%
So	155/7.23%	82/3.83%	74/3.4%
Therefore	28/1.3%	13/0.6%	16/0.7%
However	36/1.6%	33/1.54%	3/0.06%
Although	21/1%	15/0.7%	6/0.3%
In sum	18/0.82%	13/0.6%	5/0.22%
Because	70/3.24%	43/2%	27/1.24%
Also	79/3.6%	52/2.43%	27/1.17%
Moreover	17/0.7%	16/0.69%	1/0.01
For example	55/2.5%	29/1.35%	26/1.15%
Such as	29/1.34%	9/0.42%	20/0.92%
Of course	12/0.55%	4/0.19%	8/0.36%
Total	2141/100%	1176/55%	965/45%

Table 2. Means of DM categories

DMs	All	Argumentative	Expository
Exemplifer	1.78	0.80	0.97
Conclusive	0.38	0.27	0.10
Reason	1.48	0.91	0.57
Elaborative	32.68	17.59	17.12
Inferential	4.68	2.57	2.17
Contrastive	4.40	2.85	1.59
Total	61.06	33.40	27.65

Table 3. Repeated Measures ANOVA for the differences among different DM categories

	SSQ	df	MS	F	Sig	Partial Eta Squared
All essays	36236.61	5	7247.32	297.27	0.00	0.86
Argumentative	10414.72	5	2082.94	194.88	0.00	0.80
Expository	10205.47	5	2041.095	194.45	0.00	0.80

Table 4. Results of paired t-test for the difference between DM categories used in the two text types

		Mean	SD	t	df	Sig
All DMs	Arg	13.09	3.47	3.01	46	0.00
	Exp	10.84	4.06			
Elaborative	Arg	17.59	7.49	1.22	46	0.22
	Exp	17.12	7.33			
Contrastive	Arg	2.85	1.71	3.60	46	0.00
	Exp	1.59	1.43			
Inferential	Arg	1.00	0.82	0.99	46	0.32
	Exp	0.85	0.75			
Exemplifier	Arg	0.31	0.36	0.66	46	0.51
	Exp	0.38	0.63			
Reason	Arg	0.35	0.43	1.61	46	0.11
	Exp	0.22	0.35			
Conclusive	Arg	0.10	0.19	1.94	46	0.04
	Exp	0.04	0.12			

Table 5. Results of Multiple Regression for the effect of using DMs on writing quality

Essay	R	R Sq.	Sig
Arg.	0.22	0.09	0.90
Exp.	0.40	0.16	0.28