

English Writing Skill in Terms of Discourse Markers in INTERPOL Electronic Messages Written by Non-Native and Native Police Officers: A Comparative and Contrastive Study

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Abstract

Discourse markers as connective words play an important role in communication. This study tried to contrastively and descriptively evaluate discourse markers' implementation in INTERPOL electronic messages written by non-native (Iranian) and native English speaking police officers. A corpus of sixty corresponded messages through INTERPOL channel was chosen and all discourse markers in sixty messages were counted and classified according to Fraser's (2006) taxonomy. The results were analyzed by SPSS software (version 21.0) using chi-square formula. The findings confirmed that there are no noticeable differences in categories of Fraser's taxonomy of discourse markers between the Iranian non-native and native English speaking police officers apart from inferential discourse markers that are employed more frequently by non-natives than natives. It can be concluded that contrastive, elaborative, and temporal discourse markers are utilized similarly in compared texts, whereas inferential discourse markers' implementation is statistically different. **Keywords:** discourse, discourse analysis, discourse marker, e-mail

INTRODUCTION

With the advent of new technology, Computer Mediated Communication (CMC) has taken on enormous importance throughout the world during the past decades (Chalak et al., 2010). CMC is a kind of communication produced when two or more people interact with one another by transmitting messages through networked computers.

Communication via internet and intranet has revolutionized governmental and nongovernmental (i.e. business, academic, and personal) communications. Among the Internet technologies used for interpersonal communication, electronic mail (e-mail) is one of the oldest forms of CMC which has become the communication tool for a lot of people (Hafner & Lyon, 1996). According to Cho (2010, p1), in spite of the fact that most Internet users are referring to internet for e-mails, language specialist have carried out fairly small number of research on this form of communication.

INTERPOL¹, as an International non-governmental organization, has created a secure channel via internet called I-24/7 for its 190 member countries in order to create a safer world by conducting appropriate measures on fighting against organized crime. To reach that end, INTERPOL has established and used several tools, one of which is I-24/7 electronic messages through which the police authorities from 190 countries with different cultural, regional, religious, economic, hegemonic, first language, and political backgrounds from all around the world communicate with one another. The corresponded messages among National Central Bureaus² (NCB) are asynchronous in that the received messages are replied after being investigated and after receiving legal permission from the internal relevant authorities (i.e. judicial authorities). With the status of English as an international language and the expansion in the use of English, an increasing number of police officers are engaged in occupations that require them to write and exchange English messages.

Among different areas of research in language teaching, discourse analysis is the one which widely contributes to the course of research through the examinations of spoken and written language (as cited in Abdi, 2009). Also one interesting area of investigation in second language writing is to see how discourse markers (DMs) are used by non-native and native writers of English.

According to Richards and Schmidt (2002, p. 162), "Discourse markers are expressions that typically connect two segments of discourse but do not contribute to the meaning of either. These include adverbials (e.g. however, still), conjunctions (e.g. and, but), and prepositional phrases (e.g. in fact)".

Muller (2004, p. 20) states that over the past two decades or so, analysis of DMs has been a research focus in many studies related to language learning and teaching from different perspectives and approaches, such as signaling "a sequential relationship" between utterances (Fraser 1990; Fraser 1999), as marking discourse coherence (Schiffrin 1987; Lenk 1998), and from a relevance-theoretic point of view (Andersen 2001; Blakemore 2002; Blass 1990; Jucker 1993), to name just a few. DMs have been analyzed with regard to gender (Erman 1992; Holmes 1986) and age (Kyratzis and Ervin-Tripp 1999; Andersen 2001; Erman 2001), and in bilingual contexts (Goss and Salmons 2000; Maschler 2000; Matras 2000; Jalilifar 2008; Rezvani Kalajahi 2012); they have also been analyzed as a group and have been treated individually, too.

Among scholars' classifications, Fraser's (1999, 2006) taxonomy of DMs was chosen for the present classification due to the fact that it seems to be the most comprehensive classification in written discourse. Based on the (1999) taxonomy, Fraser (2006, pp. 15-

¹ For details on INTERPOL refer to its public web site on www.INTERPOL.int

² Each member state of INTERPOL has a police entity which represents the Law enforcement of that state. For Instance, in I. R. of Iran, NCB Tehran (Interpol Tehran) is the representative of I. R. of Iran Police and communicates with INTERPOL and its member countries.

16) presents a new elaborated classification which has been used in this study and is presented in table 1.

Classification		DMs
a.	Contrastive Discourse Markers	but, alternatively, although, contrariwise, contrary to expectations, conversely, despite (this/that), even so, however, in spite of (this/that), in comparison (with this/that), in contrast (to this/that), instead (of this/that), nevertheless, nonetheless, (this/that point), notwithstanding, on the other hand, on the contrary, rather (than this/that), regardless (of this/that), still, though, whereas, yet
b.	Elaborative Discourse Markers	and, above all, also, alternatively, analogously, besides, by the same token, correspondingly, equally, for example, for instance, further(more), in addition, in other words, in particular, likewise, more accurately, more importantly, more precisely, more to the point, moreover, on that basis, on top of it all, or, otherwise, rather, similarly, that is (to say)
C.	Inferential Discourse Markers	so, after all, all things considered, as a conclusion, as a consequence (of this/that), as a result (of this/that), because (of this/that), consequently, for this/that reason, hence, it follows that, accordingly, in this/that/any case, on this/that condition, on these/those grounds, then, therefore, thus
d.	Temporal Discourse Markers	then, after, as soon as, before, eventually, finally, first, immediately afterwards, meantime, meanwhile, originally, second, subsequently, when

Table 1. Fraser's model (2006)

The present study investigated the frequency of occurrence of DMs in the writings of police correspondences based on the Fraser's (2006) classification of DMs. According to the practical experience of the researcher, the frequency of the Contrastive DMs were supposed to be the highest among other categories of DMs. With this in mind, the present study was an attempt at finding answers to the following research questions:

- 1. Which categories of Fraser's taxonomy of DMs are used most frequently in INTERPOL e-mails by Iranian NNESPOs?
- 2. Which categories of Fraser's taxonomy of DMs are used most frequently in INTERPOL e-mails by NESPOs?
- 3. Is there a significant difference between the use of DMS in INTERPOL e-mails written by Iranian NNESPOs and NESPOs?

THEORETICAL BACKGROUND

Discourse

Discourse is usually defined as linguistic units larger than a sentence. Richards and Schmidt (2002, p. 160) hold that, "...discourse normally refers to larger units of language such as paragraphs, conversations, and interviews". They also maintain that discourse is a general term for examples of language use, or in other words language which is produced as the result of communication.

Carter (1993, p. 22), quoted by Nunan (2001, p. 99), defines discourse as "... any naturally occurring stretch of language occurring in context". Nunan (2001, p. 99) states

that there is no sense to talk about linguistic facts at the level of isolated sentences because, except for few sentences, these will be interpreted according the linguistic and experiential context that the utterances occur in. He further states that our understanding of language acquisition and use relies on the adoption of such a discourse view and without such a view, our understanding of other dimensions of language will be piece meal and incomplete. Nunan (2001, p. 306) also presents his own definition of discourse as "recordings of naturally occurring samples of language within their communicative context".

Discourse Analysis

Yule (2010, p.142) defines discourse as "language beyond the sentence" and further concludes that the discourse analysis copes with "the study of language in text and conversation". Yule (2010) believes that we as language users are able to understand language in use -communication, even in some cases, when it is used ungrammatically. According to him, to find out a discourse, a reader or writer analyzes lexical/linguistic and non-lexical/non-linguistic features of the text or conversation. While lexical/linguistic relationships are called cohesion, non-lexical/non-linguistic connections are named coherence (pp. 143-145).

According to Fromkin et al. (2003, pp. 209-219), discourse analysis, or the study of discourse, deals with how writers or speakers combine sentences or utterances into broader written or speech units. They further state that discourse analysis discusses issues concerning "style, appropriateness, cohesiveness, rhetorical force, topic/subtopic structure, differences between written and spoken discourse, as well as grammatical properties". Then, Fromkin et al. continue the discussion by pointing out some aspects of discourse which may have impact on the interpretation of linguistic meaning, such as pronouns, situational context, speech acts, presuppositions, and diexis.

Discourse Markers

In the literature, discourse markers have been described and analyzed by various descriptions and terminologies. Nevertheless, DMs are usually used to refer to an identical phenomenon. There are three main trends in studies of DMs namely discourse coherence, pragmatics and systemic functional linguistics.

In their seminal book on Cohesion in English, Halliday and Hasan (1976) identify five main cohesive devices in English discourse which are reference, substitution, ellipsis, conjunction, and lexical cohesion. Halliday and Hasan (1976, p. 226-7) maintain that conjunctive elements are cohesive by means of their specific meaning and they express certain meanings which presume in advance the presence of other components in the discourse. Using conjunctions in discourse specifies the way in which what is to follow next is systematically connected to what has been mentioned before. In other words, a conjunction signals the way the writer wants the reader to relate what is about to be said to what was said before. In describing conjunction as a cohesive device, they do not

Schiffrin (1987) provides an explanation of DMs as "sequentially dependent elements which bracket units of talk". She also defines DMs operationally as "... members of a functional class of verbal and nonverbal devices which provide contextual coordinates for ongoing talk" (p. 41). Because DMs can be found freely within a sentence, the units of talk can exceed the sentence. Based on this definition, it is suggested that DMs have a core meaning and coherent relations (cited in Kaveifard & Allami, 2011). In studying DMs, Schiffrin analyzes in detail the expressions such as and, because, but, I mean, now, oh, or, so, then, well, and you know in conversations.

The third approach is proposed by Fraser. Fraser (1999, p.936) studies DMs solely on "grammatical pragmatic perspective". He believes that DMs do not merely function as textual coherence but also signal the speakers' intention to the next turn in the preceding utterance. Fraser (1999) states that, in his (1987) work, he writes about a group of expressions which he calls "pragmatic formatives" (in 1999 he called them "pragmatic markers"). These pragmatic markers, usually lexical expressions, do not contribute to the propositional content of the sentence but signal different types of messages. In the 1987 paper, Fraser uses the third type of pragmatic formative as "commentary pragmatic markers", which includes what he calls DMs. In later works (Fraser, 1988, 1990, 1993) he focuses on what DMs are and what their grammatical status is (p.936).

In his work in 1999, Fraser writes about four researches done on DMs. He refers to Schiffrin (1987) as the first and the most detailed effort, "who is concerned with elements which mark sequentially-dependent units of discourse" (p.933). Fraser also refers to his own (1987) work as the second approach, which "approached DMs from solely a grammatical-pragmatic perspective" (p. 936). According to him, the third theoretical perspective is provided by Blakemore (1987, 1992), "who works within the Relevance Theory framework" (p. 936). In Fraser's view, the fourth approach to the study of DMs is provided by researchers working in the field of discourse coherence, beginning with rhetorical structure theory, and addressing "the nature of relations between the sentences of a text such that the content of one sentence might provide elaboration, circumstances, or explanation for the content of another" (p. 937).

Thus Fraser (2006) categorizes DMs under "pragmatic markers." He defines discourse markers as those "which signal a relation between the discourse segment which hosts them, and the prior discourse segment" (p. 1). He (2006) stresses five aspects attached to discourse markers' definition:

- 1. Discourse markers are just lexical expressions, not non-verbal gestures.
- 2. S1 and S2 are jointly connected. i.e. they follow each other.
- 3. S1 and S2 "encode a complete message".

Brief Review of Some Contrastive Analyses on DMS

Recently an enormous amount of research has been carried out into analyzing DMs' use and frequency in spoken and written texts comparatively, descriptively, and contrastively. Up to now, to the best of my knowledge, it seems that no research has been conducted on comparative, descriptive, and contrastive analysis of the DMs in INTERPOL messages written by native English speaking and Iranian Police officers. However, some major researches on DMs especially those carried out by Iranian researchers and related to comparison of English and Farsi are summarized as follows:

Faghih and Rahimpour (2009) examined a corpus of ninety discussion sections of applied linguistics research articles, with the goal of analyzing different aspects of academic written discourse. They considered three types of English texts written by native speakers of English, English texts written by Iranians (as non-natives of English), and Persian texts written by Iranians in order to understand the cultural differences between Persian and English-speaking researchers. The analysis revealed that "the academic writings of these groups differed in their rhetorical strategies using metadiscourse type because of their respective mother tongues. However, interactive metadiscoursal factors were used significantly more than interactional metadiscoursal factors by both groups" (p. 92).

Rezvani Kalajahi et al. (2012) attempted to better define the term discourse marker and proposed a classification of DMs in written discourse. After conducting a research on DMs, they decided to adopt the term 'discourse connectors' (DCs) by stating that the term DMs are suitable for spoken discourse and DCs function to link one segment of information to the other in a written text. They, then, defined DCs as "words and expressions that can be accommodated within the text to join one sentence with another sentence or one paragraph to another paragraph or even one idea to another" (p. 1659). Rezvani Kalajahi et al., finally, went so far as to offer their own classification of DCs in order to provide a better understanding of what DCs are and how they function.

Allami and Iranzad (2012) studied the utilization of discourse markers in oral communication between native English and Iranian EFL speakers. They recorded a non-native speakers' corpus and compared it with a native one. Their work resulted that non-native EFL speakers used discourse markers more frequently than native speakers.

Khazaee (2012) investigated the use of DM by Iranian English teachers. He selected three teachers from one of the private institutes in Iran who scored high in IELTS. Two of the selected teachers had some years of experience of living in native English countries. Conversations of the participants were recorded in classroom situation and analyzed on the ground of DMs occurrence. Finally, he concludes that those living in native environment are better users of DMs based on the high rate of markers frequency in their speech.

Eslami-Rasekh, Eslami-Rasekh and Simin (2012) compared the use of DMs in north-American and Persian EFL lectures. They studied the academic genre of spoken language (i.e. lectures). The research, based on reviewed corpora, claims that DMs are used more in lectures by Persian than Americans. In addition, they also reported some similarities and differences of DMs use between two corpora.

Vaez Dalili and Vahid Dastjerdi (2013) compared the use of DMs in native English and Iranian political media corpora written in English. They found that "in both corpora, implicative discourse markers (IDMs) and elaborative discourse markers (EDMs) have the lowest and highest frequency counts respectively" (p. 39). In addition, they concluded that there is a significant difference in use between different discourse marker types in native and non-native corpora.

Alavi-Nia and Mozaffari (2014) compared the use of DMs in three EFL and three PFL (Persian as Foreign Language) course-books to find out whether the use of markers (they call them discourse particles) are the same and if Iranian curriculum designers keep the pace with their international counterparts. In addition, they contrasted the dialogues in course-books to evaluate the extent to which EFL and PFL course-books mirror natural use of language in English and Persian communities. To do so, they used the conversations in some American and Iranian TV series. The results indicated that DMs are more frequent in American books than Iranian ones.

Faghih and Mohseni (2014) analyzed contrastively metadiscourse markers used in texts developed by non-native (Iranians) and the ones written by native (Americans) speakers to find out whether interactional metadiscourse markers are different and/or similar in texts developed by non-native (Iranians) and native (Americans) speakers and to what extent these interactional metadiscourse markers are different and/or similar. The results of the research indicated that the interactive metadiscourse markers were not statistically different in texts developed by non-natives (Iranians) and native (Americans). But the interactional metadiscourse markers were statistically different in texts developed by non-native (Iranians) and native (Americans).

Finally, Mohseni and Golestani (2015) evaluated contrastively and descriptively 'contrastive' discourse markers' implementation in ESP books of computer science developed by non-native (Iranian) and native (British) authors. To do so, they chose a corpus of two academic ESP books which are used by ESP teachers in Iranian universities and counted all contrastive discourse markers in the first reading parts of the books (totally 32 texts, each book 16 readings) and they also classified based DMs on Fraser's (2006) taxonomy. The results indicated that the utilization of contrastive discourse markers is not significantly different in non-native and native developed texts.

METHOD

The objective of this study is to compare and describe the use of discourse markers utilized by Iranian non-native English speaking Police Officers (INNESPO) and native

English speaking Police Officers (NESPO) in their natural and authentic electronicmessage (e-mail) interactions through INETRPOL channel in 2013.

Corpus

The corpus includes English messages about criminal cases including murder, drugs, theft, financial fraud, wire fraud, forgery, money laundering, illegal immigration, and all other international crime which are corresponded with National Central Bureaus of Interpol Organization in a special period of time (one year). The corpus includes two parts as follows:

- 1. Thirty English messages sent about the criminal matters from NCB Tehran to other NCBs written by NNESPOs who learned EFL. And
- 2. Thirty English messages received about the criminal matters from NCBs which are written by NESPOs who use English as their first language.

Procedures

The following steps were taken in order to achieve the ends of this research:

a. Due to time limitation, only sixty email messages (30 messages from each group) which abound in DMs were chosen for the main analysis.

b. As far as possible, to minimize personal errors two raters (the researcher himself and another MA student of TEFL) counted the number of discourse markers in native and non-native messages independently.

c. Fraser's (2006) classification was adapted for this study into four tangible tables to make it more practical and easy to review.

d. Raters were asked to count discourse markers and write the numbers in each table separately for each message.

e. SPSS software version (21.0) analyzed the statistics and using Fraser's (2006) model the differences and similarities were examined and compared to see to what extent the messages of two groups are different and or similar in their use of discourse markers. The results are given in the next section and are also shown in the following tables.

RESULTS

The main purpose of this study was to explore contrastively the DMs utilized by Iranian non-native English speaking police officers (INNESPO) and native English speaking police officers (NESPO) in their natural and authentic email interactions through INETRPOL channel in 2013.

Analysis of the First Research Question

The first research question of this study asked which categories of Fraser's taxonomy of DMs are used most frequently in INTERPOL emails by Iranian NNESPOs. In order to

answer this question, frequency and percentage of use of discourse markers in INTERPOL emails by Iranian non-native English speaking police officers were calculated and the results are presented in Table 2 below.

Table 2. Frequency and Percentage DMs use in INTERPOL emails by Iranian NNESPOs

Discourse marker	Frequency	Percentage		
Elaborative	47	43.9%		
Inferential	24	22.4%		
Contrastive	19	17.8%		
Temporal	17	15.9%		
Total	107	100.0%		

As Table 2 above demonstrates, 'Elaborative' discourse markers (f = 47/107, 43.9%) have been employed most frequently in INTERPOL emails by Iranian non-native English speaking police officers, followed by 'Inferential' discourse markers (f = 24/107, 22.4%), 'Contrastive' (f = 19/107, 17.8%), and then 'Temporal' discourse markers (f = 17/107, 15.9%) respectively.

Analysis of the Second Research Question

The second research question of this study asked which categories of Fraser's taxonomy of DMs are used most frequently in INTERPOL e-mails by NESPOs. Frequency and percentage for occurrence of discourse markers in INTERPOL e-mails by native English speaking police officers were computed and the results are provided in Table 3 below.

Discourse marker	Frequency	Percentage
Temporal	20	26.0%
Elaborative	38	49.4%
Contrastive	15	19.5%
Inferential	4	05.2%
Total	77	100.0%

Table 3. Frequency and Percentage of Use of DMs in INTERPOL e-mails by NESPOs

A quick look at Table 3 above indicates that 'Elaborative' discourse markers (f = 38/77, 49.4%) have been applied most frequently in INTERPOL e-mails by native English speaking police officers, followed by 'Temporal' discourse markers (f = 20/77, 26.0%), 'Contrastive' (f = 15/77, 19.5%), and then 'Inferential' discourse markers (f = 4/77, 5.2%).

Analysis of the Third Research Question

The third research question of this study questioned if there is any significant difference between the use of DMS in INTERPOL e-mails written by Iranian NNESPOs and NESPOs. In order to find answer to this question, the analysis of crosstabs (Chi-square) was performed. The results of Chi-square test that was conducted to compare the use of discourse markers in INTERPOL e-mails by Iranian NNESPOs and NESPOs are given in Table 4 below.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.363 ^a	3	.010
Likelihood Ratio	12.606	3	.006
Linear-by-Linear Association	.007	1	.936
N of Valid Cases	184		

Table 4. Chi-Square Test for application of DMs in INTERPOL e-mails by IranianNNESPOs and NESPOs

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.72.

As can be seen in Table 4, Chi-square results revealed that the differences observed in Table 4 are statistically significant (x2 (3) = 11.363, n = 184, p = .01, p < .05) in which the value of chi-square was 11.363, and the p value (.01) was below the selected significant level for this study (.05); accordingly we reject the null hypothesis of the present study that states there is no significant difference between the use of DMs in INTERPOL emails by Iranian NNESPOs and NESPOs. In fact we can claim that there is a significant difference between the use of DMs in INTERPOL emails by Iranian non-native English speaking police officers and native English speaking police officers. The main source of difference was the overuse of inferential discourse markers by non-native speakers.

The frequencies, percentages and standardized residuals (Std. Residual) for the categories of Fraser's taxonomy of discourse markers used most frequently in INTERPOL e-mails by Iranian NNESPOs and native English speaking police officers are set forth in Table 5 below. Standardized residuals beyond +/- 1.96 (Filed, 2009) reveal that the use of the discourse markers is not random; therefore they are significantly beyond expectation.

		Contrastive	Elaborative	Inferential	Temporal	Total
	Count	19	47	24	17	107
NNESPOs	% within	17.8% 43	43.9%	22.4%	15.9%	100.0%
	Language					
	Std. Residual	2	3	2.0	-1.0	
	Count	15	38	4	20	77
NESPOs	% within	19.5%	49.4%	5.2%	26.0%	100.0%
NL51 05	Language					
	Std. Residual	.2	.4	-2.3	1.1	
	Count	34	85	28	37	184
Total	% within	18.5%	46.2%	15.2%	20.1%	100.0%
	Language					100.0%

Table 5. Frequency and Percentage and Std. Residuals of Use of DMs in INTERPOL e-mails by Iranian NNESPOs and NESPOs

According to the results presented in Table 5, it can be concluded that 19 out of 107 (17.8 %) of the discourse markers were 'Contrastive' in non-native INTERPOL e-mails, and 15 out of 77 (19.5 %) in native e-mails. Also 47 out of 107 (43.9 %) of the discourse markers were 'Elaborative' in non-native INTERPOL e-mails, and 38 out of 77 (49.4 %) in native e-mails. Besides Table 5 also indicates that 17 out of 107 (15.9 %) of the

discourse markers were 'Temporal' in non-native INTERPOL e-mails and 20 out of 77 (26.0 %) in native e-mails. Table 5 also reflects the fact that 24 out of 107 (22.4 %) of the discourse markers were 'Inferential' in non-native INTERPOL e-mails, but just 4 out of 77 (5.2 %) in native e-mails.

Examining Std. Residuals (see Table 5 above) shows that just one of the above mentioned statistics is selected significantly beyond expectation, i.e. Std. Residuals is beyond +/- 1.96. This means that the 'Inferential' discourse markers are significantly different in the two types of emails. In fact, the use of 'Inferential' in Iranian non-native emails (22.4%, Std. Residual = 2.0 > 1.96) is significantly above expectation, but the use of 'Inferential' in native emails (5.2%, Std. Residual = -2.3 < -1.96) is significantly below expectation.

DISCUSSION AND CONCLUSION

According to the achieved results, in studying the messages, it was found that 'Elaborative' discourse markers have been employed most frequently in INTERPOL emails by Iranian non-native English speaking police officers, followed by 'inferential' discourse markers, 'Contrastive', and then 'Temporal' discourse markers. In the same vein, Talebinejad and Namdar in their (2011) study exploring the role of discourse markers in Iranian High School English text books have concluded that elaborative discourse markers are more frequent in fourth grade text book than the others. Therefore, the findings of this study verify their claims.

To the extent this study was concerned, the findings confirmed that there seems to be no noticeable difference in categories of Fraser's taxonomy of DMs between the e-mails produced by Iranian non-native English speaking police officers and by native English speaking police officers apart from inferential discourse markers that are employed more frequently by NNESPOs than NESPOs. In other words, it can be concluded that contrastive, elaborative, and temporal discourse markers are utilized similarly in compared texts, whereas inferential discourse markers` implementation is statistically different.

In addition, results indicated that discourse markers are more frequent in NNESPOs' messages than NESPOs' messages. Exploring the raw data obtained from two sets of emails showed that 107 out of 4543 of words (2.35%) counted in the INTERPOL emails written by Iranian NNESPOs were discourse markers, while 77 out of 6060of words (1.27%) in INTERPOL emails written by NESPOs were discourse markers. This points that discourse markers are relatively more abundant in Iranian non-native police officers' emails.

The findings indicate that some of the non-native police officers are not aware of the use of DMs in their writings and some do not have sufficient knowledge for the selection and use of proper DMs. It means that some non-native police officers do not have sufficient knowledge to choose and use DMs appropriately according to the social context and this problem deserves to be taken into consideration in future syllabus design, materials development and teaching practices.

Pedagogical Implications

Some of the pedagogical implications of this study would be:

1. The findings of the study have pedagogical implications for both syllabus designers and instructors, especially at Police University.

2. Iranian non-native English speaking police officers may concentrate more closely on the role discourse markers have in EFL especially in written communication.

3. Finally, hopefully the findings of this study would be useful for all language syllabus designers, EFL instructors and learners of general English in paying more attention to discourse markers.

Suggestions for Further Studies

The topic of discourse markers can still be used for further studies. Among them, a few are suggested as follows:

1. A contrastive analysis on discourse markers used in extradition documents developed or written by native and non-native Iranian judicial authorities can be undertaken.

2. A comparative and contrastive study of English writing skill in terms of hedges in INTERPOL telephone conversations spoken by non-native and native police officers is another interesting topic for research.

3. A contrastive analysis of discourse markers utilized in ESP translated books/articles and their original texts seem to be another interesting topic for further study.

4. Finally, a critical contrastive analysis of INTERPOL electronic messages written by non-native and native police officers is recommended to future researchers.

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