

The Effect of Explicit Teaching of Textual Metadiscourse on ESAP Reading Comprehension Performance of Iranian University Students

Mohammadreza Negahi¹
Naser Nouri²

Abstract

The present study attempted the relative effect of explicit teaching of textual metadiscourse markers on ESAP reading comprehension performance of Iranian university students through an awareness raising experiment. A sixty-item multiple choice ESAP reading comprehension test of accounting was developed and validated to act as the pre-test and post-test. The test included items for assessing specific comprehension of students in their specialist subject. The test was administered to 80 undergraduate intermediate and upper-intermediate students randomly assigned to experimental and control groups as the pre-test. After the treatment was over, the English for Specific Academic Purposes test was again given to the same students as the post-test. The results of the two-way ANOVA indicated that the experimental group benefited from the explicit teaching of textual metadiscourse markers and the treatment had a facilitative effect on ESAP reading comprehension of students. Moreover, the results of the two-way ANOVA showed that the proficiency level had an effect on ESAP reading comprehension of the students, that is upper-intermediate level students in the experimental group benefited more from the explicit teaching of textual metadiscourse markers. The overall results of the study provide empirical support for the facilitative effect of explicit teaching of textual metadiscourse markers on ESAP reading comprehension of students.

Keywords: Metadiscourse, Textual Metadiscourse, ESAP, Reading

¹Ph.D. Candidate in EFL, Department of Education, Islamic Azad University, Behbahan Branch, Behbahan-Iran. Email: negahimohammadreza@gmail.com

²Lecturer in EFL, Department of English and Linguistics, Islamic Azad University, Ahar Branch, Ahar-Iran. Email: n-noori@iau-ahar.ac.ir

INTRODUCTION

In recent years, there has been an upsurge of interest in second language reading research and practice (Grabe and Stoller, 2001). It can be said that this interest is due to the increasing recognition that reading abilities are of high importance for academic learning, and that L2 reading represents the primary way beyond the classroom (ibid). Alderson and Urquhart (1984) point out that in many parts of the world a reading knowledge of a foreign language is often important in academic studies, professional success and personal development. This is particularly true of English because much professional, technical and scientific literature is nowadays published in English. According to Grabe (1997) many scholars have argued that reading is the most important language skill in second language contexts. Nunan (1999) states that more time is spent on teaching reading than any other skill. Farhady (1998) argues that since the language of science and technology is often English, reading in English has received priority among other objectives of English language teaching. He reasons that the main goal of teaching English in many countries of the world especially within the educational program is set to improve the reading ability of the students in order to enable them to extract incoming information from the English sources in their field of studies. Carrell (1988) argues that the most important reason why foreign students learn English is reading.

Reading has been the most important academic language skill for second language students (Eskey, 1988; Carrell, 1989; Robinson, 1991; Grabe and Stoller, 2001). Grabe and Stoller (2001, p.187) maintain that “in academic settings, reading is assumed to be the central means for learning new information and gaining access to alternative explanations and interpretations”.

Reading is seen as an interactive process incorporating both bottom-up and top-down knowledge (Shih, 1992; Vacca et al., 1995). Several scholars have generally argued that efficient and effective readers use both top-down and bottom-up processes operating interactively and simultaneously to enhance comprehension (Bernhardt, 1991; Grabe, 1991; Stanovich, 1991). This approach is particularly effective in teaching reading skills for academic or specific purposes. In addition to decoding meaning from print with bottom-up skills, successful readers implement top-down skills to

activate their prior knowledge of content and use textual clues to help them cope with new information.

In recent years there has been an upsurge of interest in metadiscourse from a variety of ESP perspectives to consider, for example, its impact on reading comprehension (Infantidou, 2005). Metadiscourse is generally defined by Vande Kopple (1997, p. 2) as “discourse that people use not to expand referential material, but help their readers connect, organize, interpret, evaluate and develop attitudes towards that material”. In the same manner, Hyland (1998, p. 438) considers metadiscourse as “those aspects of the text which especially refer to the organization of the discourse or the writer’s stance towards either its content or the reader”. In Hyland’s view, metadiscourse is a key to the overall purpose of language use. It is a particular form of discourse which is carrying textual and interpersonal functions without which it is impossible for readers to contextualize a text, impossible for writers to gain acceptance for their work (*ibid*).

Following Infantidou (2005, p. 1350), “linguistic metadiscourse yields more positive cognitive effects than a text lacking metadiscourse elements and it does so for less processing effort. Especially for academic texts, which typically aim at conveying highly specific, strictly technical and unequivocally relevant information, metadiscourse items contribute to utterance interpretation in significant ways, by creating the linguistic infrastructure for maximally effective communication of ideas”.

Camiciottoli (2003) argues that the awareness of metadiscourse is particularly useful in helping EFL learners of English with the difficult task of figuring out the writer’s position when reading challenging authentic material. Bruce (1989, cited in Camiciottoli, 2003) states that metadiscourse is helpful for non-native learners to better understand the writer’s line of reasoning in argumentative texts. Vande Kopple (1997, cited in Camiciottoli, 2003) observes that the instruction of metadiscourse to L2 readers can help them distinguish factual content from the writer’s commentary.

Hyland (1999) argues that metadiscourse has two main functions: textual and interpersonal. Textual metadiscourse is used to organize the propositional information by pointing out, signaling sequences, cross-referencing, connecting ideas, previewing material, etc. Interpersonal metadiscourse is used to modify and highlight

aspects of the text. It also helps writers give attitude to the text with hedges, boosters and self-reference (ibid).

Dahl (2004) points out that textual metadiscourse has been shown to be a typical feature of metadiscourse. Hyland (1998) maintains that metadiscourse is a typical feature of text because “it provides cues to the pragmatic presupposition which help readers process the text, encoding relationships between ideas and ordering material in ways that the potential audience will find appropriate and convincing” (p.440). He (1999) also maintains that textual metadiscourse markers guide the reading process by indicating discourse organization and clarifying propositional connections and meaning. Consequently, it is likely that one could improve the comprehension of a text by raising his textual metadiscourse consciousness.

Dahl (2004) also states that the main function of textual metadiscourse is to help the readers go through the text. In a study by Hyland (1999), it was shown that textual metadiscourse constituted about 70% of all metadiscourse in the course books. “Such metadiscourse provides an overt framework which not only clarifies the schematic structure of the text but also serves to fill in gaps and explicitly spell out connections to related ideas, thus helping to convey propositional context more coherently to novices” (Hyland, 1999, p.9). Several studies have investigated logical connectives, hedging and the presence of metadiscourse in text. In a study, Ozono (2002) found that the subjects, high and low, achieved higher degrees of text comprehension when logical relations were indicated explicitly rather than implicitly. Hyland (2000) suggests that hedges are often unnoticed by both L1 and L2 readers respectively. Jalilifar (2007) recommends that the explicit instruction of hedging can improve writing and the writing performance of novice researchers.

Crismore (1989) attempted to determine whether including informational and attitudinal metadiscourse in social studies textbook passages would have any effect on reading retention with sixth graders. She found that there was some improvement in retention after reading passages with both types of metadiscourse. In a study conducted by Camiciottoli (2003), two groups of students read selected extracts from two versions of the same text differing according to quantity and type of metadiscourse, each group then took a reading comprehension test and their scores were compared. The findings suggest that the more presence

of pronounced metadiscourse elements could have a positive influence on ESP reading comprehension.

In addition to the above-mentioned studies, several other studies (Nippold et al., 1992; Nishimoto, 1997; Chung, 2000; Ozono, 2002) have investigated how logical connectives, as one of the textual metadiscourse markers, are tackled by L2 readers of different proficiency levels. Nippold et al., for example, examined how logical connectives could be processed by English native speakers of different proficiency levels. They divided their native (L1) subjects into four age groups, who were required to carry out both reading and writing tasks involving logical connectives. The results showed that the older age group had higher scores on both reading and writing tasks than the younger age group. Chung (2000) found that the low proficiency group, unlike the high and medium groups, relied heavily on explicit metadiscourse signals as meaning making devices.

In a study conducted by Jalilifar and Shooshtari (2011), it was shown that the explicit teaching of hedging can enhance the ESAP reading comprehension performance of students because the explicit instruction can lead to enhancing the comprehension of ideas presented in the text. Tavakoli et al., (2010) attempted to investigate different types of metadiscourse awareness on L2 reading comprehension of EFL learners. Their findings showed that explicit instruction of textual metadiscourse markers could improve learners' reading comprehension more than interpersonal metadiscourse markers.

However, it should be said, to the best of the researchers' knowledge, there has been no experimental research on the effect of the explicit teaching of textual metadiscourse markers on ESAP reading comprehension performance of Iranian university students. Thus, the present study intends to show whether the explicit teaching of textual metadiscourse markers (adopted from Hylands' classification of metadiscourse, 1999) has any effect on the ESAP reading comprehension performance of Iranian university students of accounting. Thus, this study attempted to answer the following research questions:

1- Does explicit teaching of textual metadiscourse markers have any effect on ESAP reading comprehension performance of Iranian university students of accounting?

2- Does the proficiency level of the students have any effect on ESAP reading comprehension performance of Iranian university students with reference to teaching textual metadiscourse markers?

METHODOLOGY

Subjects

80 male and female subjects who took part in this study were students of Accounting at Islamic Azad University of Behbahan. Their ages ranged from 20 to 27 and were chosen from a population pool of 190 students on the basis of their performance on the Nelson English Language Proficiency Test, section 500. Only those who scored between one standard deviation above and below the mean were chosen as the final sample and were randomly assigned to control and experimental groups. Each group was further divided into intermediate and upper-intermediate sub-groups of language proficiency, and then a t-test was conducted to ensure that control and experimental groups were balanced. See Table 1.

Table 1.
Group Statistics

CLASS	N	Mean	Std. Deviation	Std. Error Mean
NELSON	40	28.0000	6.84255	1.08190
Experimental control	40	27.0500	6.71374	1.06154

Table 2.
Test to Check the Groups' Homogeneity

	t	Sig	Mean Difference	Std. Error Difference
Nelson Experimental-Control	.627	.533	.95	1.516

Instrumentation

In order to accomplish the objectives of this study, the following instruments were employed.

a. Nelson English Language Proficiency Test: A 50-item English Language Proficiency Test (section 500 D) was used to ensure the homogeneity of control and experimental groups and to divide them into intermediate and upper-intermediate groups in terms of language proficiency. The test consisted of cloze test, structure, vocabulary, and pronunciation in a multiple-choice format. This test was also piloted

with similar groups of students from the same pool of subjects to determine the reliability of the test.

b. ESAP Reading Comprehension Test: The second instrument was a 60 item multiple-choice ESAP reading comprehension test designed and constructed based on the students' accounting textbook. All passages were unseen and selected from the book: English for the Students of Accounting (I), SAMT, 1996. The selection of this book was due to the following reasons: a) it was prepared, assisted and edited by a number of Iranian language specialists, b) it has been taught in Iranian universities for a long time, and c) it was the textbook of the students selected by the university.

Piloting

First, a 60-item multiple-choice ESAP reading comprehension test was designed and constructed based on the students' textbook. Second, a couple of BSC students of accounting were asked to go through the newly constructed reading comprehension test and provide their comments. Using a group of ten students, a pilot study was conducted to estimate the concurrent validity of this instrument via examining the correlation coefficient of the ESAP reading comprehension test and the Nelson test to see if there is a significant relationship between the two tests to fulfill the purpose of this study (validity: 0.74). Also, the reliability of the newly developed ESAP test of reading and the Nelson test was estimated through KR-21 formula (0.76 and 0.79 respectively).

Procedure

The general purpose of this study was to raise the subject's awareness of the presence of textual metadiscourse markers in the reading passages of students' textbook. To this end, the subjects of the experimental group were given awareness raising treatment on textual metadiscourse markers. In order to collect the data required to achieve the purpose of the study, the following steps were taken. First, the Nelson English Language Proficiency test (section 500 D) was administered to a group of 190 undergraduate accounting students to select the final homogenous sample. Based on their performance on the Nelson test, 80 subjects who scored between one standard deviation above and below the mean were selected as the final sample. They were divided into intermediate and upper-intermediate levels of

language proficiency, and also randomly assigned to control and experimental groups. Then, a t-test was conducted to ensure the homogeneity of control and experimental groups, and it was shown that the two groups are homogeneous. First, a pre-test was given to the students. Each session, the experimental group received text treatment in which different kinds of textual metadiscourse markers were identified and taught explicitly to the students (in terms of their meanings and functions in the relevant texts), then, the normal methodology of the classroom which was translating and clarifying the meaning of words was taken. One reading passage of the students' textbook was taught per session. The course comprised ten sessions. The subjects of the control group were taught the same materials using the normal methodology of the classroom. After the treatment, both experimental and control groups were given the post-test. The pretest and the post-test were the same.

Data Analysis

In order to determine whether explicit teaching of textual metadiscourse markers and proficiency level had any effect on the ESAP reading comprehension performance of students, a two-way ANOVA statistical technique was utilized. The two way ANOVA was run in order to find out whether the differences among the mean scores for the two experimental and control groups, at two levels of intermediate and upper-intermediate groups in the post test, were significant or not.

RESULTS

To compare the performance of control and experimental groups across the two proficiency levels on the ESAP reading comprehension (Table 3), a two-way ANOVA was conducted. Using the results of the two-way ANOVA, three questions can be investigated, that is, the main effect of the control and experimental groups, the main effect of the proficiency levels and the interaction effect of the groups and the proficiency levels. As presented in Table 4, the F for the effect of the Group is 53.50. This amount of F-value is greater than the critical value of F, i.e. 3.96. Therefore, there is a significant difference between the mean scores of the two groups. Consequently, the answer to the first research question- the effect of explicit teaching of textual metadiscourse markers on ESAP reading comprehension performance

of Iranian university students of accounting- is positive.

In order to answer the second research question another two-way ANOVA was used. As indicated in table 4, the F value for the effect of the LEVEL is 32.01. This amount of F-value is greater than the critical value of F, i.e. 3.96. There is a significant difference between the mean scores of the two proficiency levels. Therefore, it is concluded there is a significant difference between the performance of the control and experimental groups with respect to the proficiency level of students, that is, upper-intermediate level students in the experimental group benefited more from the explicit teaching of textual metadiscourse markers. Moreover, the F for the interaction between GROUP and LEVEL is 6.17 being greater than the critical value of F, i.e. 3.96, again suggesting a significant interaction between the two variables of GROUP and LEVEL.

Table 3.

Statistics for Exp and Con Groups' Gain Scores at Inter and Upper levels

Class	Level	Mean	Std. Deviation	N
Exp.	intermediate	2.5000	1.35724	20
	Upper.	5.4500	2.25890	20
	Total	3.9750	2.36955	40
Con.	intermediate	.7500	1.44641	20
	Upper.	1.9000	1.20961	20
	Total	1.3250	1.43915	40
Total	intermediate	1.6250	1.64375	40
	Upper.	3.6750	2.53577	40
	Total	2.6500	2.36054	80

Table 4.

Two-way ANOVA for Main Effects of Class, Level and Interaction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
CLASS	140.450	1	140.450	53.505	.000
LEVEL	84.050	1	84.050	32.019	.000
CLASS * LEVEL	16.200	1	16.200	6.171	.015
Error	199.500	76	2.625		
Total	1002.000	80			

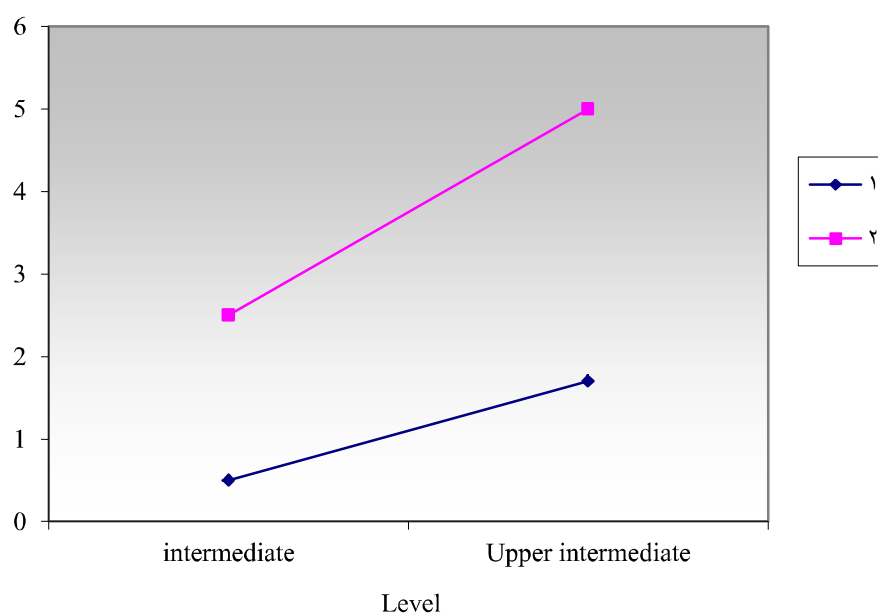


Fig 1. Estimated Marginal Means

According to this graph, both groups have done better in the post test, and the upper-intermediate students have performed better than the intermediate students.

DISCUSSION AND CONCLUSION

To understand a text (for example, an ESAP one), it is important for a reader to create a coherent mental representation in which what is represented in the text is logically related to the reader's background. Therefore, it should be the goals of the writer to have the reader build the mental representation he wants to convey (Degand, et al., 1999). It is possible to make these pieces of information explicit in the text. The present study attempted to examine to what extent the explicit presentation of textual metadiscourse markers affect the reading comprehension performance of Iranian university students of accounting.

The results of the present study indicated that the subjects of the experimental group benefited from the explicit teaching of textual metadiscourse markers and the text treatment had the desired effect on the ESAP reading comprehension performance of the students. In addition, the results of two-way ANOVA test indicated that there was a significant interaction between the students' proficiency level on their performance on ESAP reading comprehension tests. This is indicative of upper-intermediate students' better ability to deal with textual metadiscourse markers in the context of English for Specific Academic Purposes.

It can be concluded that textual metadiscourse markers can be taught successfully because the explicit teaching of textual metadiscourse markers can improve ESAP reading comprehension. Textual metadiscourse markers clarify the schematic structure of texts and make connections to related ideas. Furthermore, the findings of this study indicated that the combination of ESAP reading comprehension and the proficiency level of students had an interaction effect. Moreover, the results showed that textual metadiscourse markers are a topic that deserve more attention in ESAP reading research, and perhaps most importantly identifies some scientific directions for further research.

The findings of the present study have some pedagogical implications for ESAP reading classes. On a practical level, these findings may be used to determine instructional actions to be undertaken in this or similar teaching contexts. In fact, the most important contribution of this study is its classroom applications. Since students seem to have little awareness of textual metadiscourse markers and the interactional aspects of reading in general, specific instruction should be integrated into the ESAP reading courses to help students become more successful readers. This is a particularly crucial aspect in academic fields in which most students have scientific backgrounds and scarce knowledge of linguistic notions.

Students can be taught to use their knowledge to infer the various textual metadiscourse markers in the texts. Drawing the student's attention to the textual metadiscourse markers enables them to perceive the relationships among ideas and to integrate the text semantically, constructing meaningful thought units. Besides, the findings of this study have implications for material developers regarding providing materials which enable students to activate their

schemata. The materials should help students to become familiar with different strategies which are helpful to comprehend the passages deeply. They can make learners aware that textual metadiscourse markers can be made explicit too, and they can suggest some practical techniques affecting reading comprehension. These activities help students form a mental representation of the role of textual metadiscourse markers in text organization. Students are more likely to use textual metadiscourse markers as a comprehension strategy with greater awareness of their contributive role in text organization.

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