Original Paper

The Role of Instructing Substitution as a Kind of Grammatical Cohesion on Its True Identification and Creation of Modal, Reporting and Conditional Contexts

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Abstract

In an effort with a two-fold research question regarding the role of teaching substitution as a kind of grammatical cohesion on the true identification of confusing substitution elements with cohesive or noncohesive roles in different contexts and also the production of modal, reporting and conditional contexts through clausal substitution acquaintance, the following procedures were taken. First 120 male and female EFL students were selected from Iranshahr Azad University. Having administered the language proficiency test, researchers selected 80 students as intermediate subjects according to their TOEFL band scores. First, pretests of cohesion identification (substitution) and production of modal, reporting and conditional environments were administered to both control and experimental groups. Then, the experimental group was exposed to the teaching of the above-said cohesive device. Finally, post-tests of substitution elements identification and modal, reporting and conditional contexts production through clausal substitution familiarity were administered. The results showed that cohesive device treatment helped students on the true identification of substitution elements. Another finding proved that EFL students may have no difficulty in learning certain rules or classification of rules and application of their clausal substitution knowledge in creating modal, reporting and conditional contexts. Our findings can have implications for the field of language learning and teaching by deepening our understanding of the nature of the cohesive devices used by Iranian intermediate EFL learners in the process of reading comprehension and also applying their knowledge of cohesive devices not only in reading skill but also in speaking and writing skills to have more fluent and

accurate speakers, writers and successful readers.

Keywords

cohesion, cohesive devices, modal, reporting, conditional contexts

1. Background of the Study

An earlier framework for describing language proficiency was that incorporated in skills and components. These models distinguished skills (listening, speaking, reading, and writing) from components of language (grammar, vocabulary, phonology), but did not indicate how skills and knowledge are related. A more serious limitation of skill / components model was its failure to know the complete framework of language use which refers to the context of discourse and situation (Bachman, 1990). Recent frameworks of communicative competence have included several different components associated with what that is called language competence (Bachman, 1990; Bachman and Palmer, 1996).
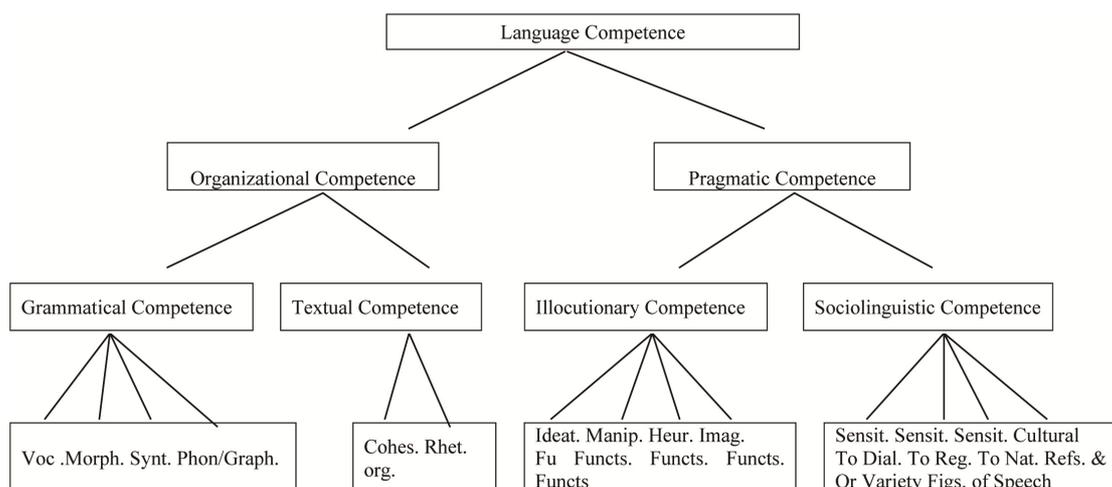

Figure1. Components of language competence adopted from Bachman (1990)

According to Gascoigne (2005) these competencies help readers in carrying out a huge number of various strategies and tasks in order to ease reading comprehension. Textual competence includes "the knowledge of conventions for joining utterances together to form a text which is essentially a unit of language-spoken or written- consisting of two or more utterances or sentences that are structured according to rules of cohesion and rhetorical organization" (Bachman, 1990, p. 88). Due to the important role of textual competence and our broader view of the competence, Mu (2006) reports that English instructors should be aware of issues which exist in communicative competence and reinforces the preparation of students' awareness of textual competence within communicative English classroom. Regarding the significant role that a text plays in reading comprehension, a great deal of attention has always been paid to text processing in the field of discourse research. Reading comprehension researchers are concerned with mechanisms of textual cohesion. Moreover, they offer a hypothesis to

illustrate the assumptions underlying coherence in the mind of the reader (Yeh, 2004). Many educators have identified the central role of cohesion in relation to second language reading and writing skills. Studies have shown that second language learners are not able to comprehend a given text better than native speakers in the case of absence of cohesive devices within the text (Mojica, 2006). To highlight the role of cohesion as an inevitable part of textual factors, Halliday and Hasan (1976) claim that it includes the ways which help us to show the semantic association among different parts of the text. Halliday and Hasan (1976) state that cohesion refers to dependencies of some elements in texts on other ones in order to interpret them truly. Pandian and Assadi (2010) claim this definition takes into consideration "the presence of semantic ties (elaboration, extension and enhancement) between linguistic items on one hand, and their interdependency (paratactic, hypotactic or cohesive) in the continuity of the text on the other hand" (p.71).

According to Halliday and Hasan (1976) the potential for cohesion is based on the fact that the organized resources including reference, ellipsis, substitution and so on exist within the language itself. Since cohesion is to a certain extent conveyed both through grammar and vocabulary, we can refer them therefore, to grammatical cohesion and lexical cohesion (Halliday and Hasan, 1976). McNamara, Louwerse & Graesser (2005) clarify the meaning of cohesion and coherence as follows: both stand for how words, constituents, and opinions which are conveyed in a text are associated with specific levels of language, discourse, and word knowledge. Rapp et al. (2007) claim that by cohesion the constituents are arranged in explicit linguistic elements (i.e. words, features, signals, constituents) and their combinations. Coherence, however, results from an interaction between text cohesion and the reader. Coherence reflects the degree to which appropriate, meaningful connections are established between elements of text and the readers' prior knowledge (Rapp et al, 2007).

Halliday and Hasan's Cohesion in English (1976) stimulated many studies such as Lubleska (1991), Chung (2000), Al-Jarf (2001), Cain (2003), Moreno (2003), Morris (2004), Yeh (2004), O'Reilly and McNamara (2007) to be conducted in the area of cohesion. A brief account of some of these studies is presented as follows:

Demel (1990) investigates the relationship between overall comprehension and the comprehension of coreferential pronouns for second language readers of English. The results suggest that the problem with coreferential ties misunderstanding is caused when the relation between a specific pronoun and a particular descriptive expression is misapprehended. A comparison of L2 data with that of L1 reveals that comprehension problems regarding anaphoric relations are two pronged. First, L2 readers encounter difficulties when they are unfamiliar with the descriptive expressions used as the antecedent of a coreferential pronoun. Second, lack of comprehension of these expressions may be indicative of a lack of knowledge of the target culture.

Lubleska (1991) studies some samples of materials intended to facilitate advanced learners to read more efficiently than before for academic purposes. The materials hold learners' attention on the role of different cohesive devices concerning with various parts of a text. The aim was to sensitize the learners

to the ways these devices can enable them to realize a text. This goal was achieved through the employment of discovery exercises applied to an authentic text. After working through these exercises learners sharpened awareness of the need to keep checking, as they read a text, that they have interpreted its cohesive devices in a way that make sense in the context of the text as a whole.

Taboada (2000) does a study of cohesion in a bilingual corpus. The findings showed that the comparison of the number of cohesive links used for each language presented the equal ratio (0.068) of cohesive elements to words in both English and Spanish. The type of cohesive ties that the subjects used was also very alike in both languages. Lexical cohesion and specially the use of repetition of the same item was the most extensively used kind. Lexical cohesion was followed by the use of reference. Substitution and ellipsis were found to be related to each other since ellipsis is substitution by zero. These types of cohesive ties had a low frequency of usage, but ellipsis was used more often.

One more study conducted in the field of cohesion was in the U.K. by Cain (2003) who attempts to investigate the relations between children's text comprehension, and to assess their ability to create a coherent and cohesive story. Cain (2003) guesses a relation between reader's text comprehension text ability and creation of a structurally coherent story. And this prediction was according to the fact that comprehension involves the creation of an integrated and coherent expression of a text's meaning. Findings of this study show that children with low text comprehension skill produce narratives which are poor concerning both structural coherence and local cohesion.

Moreno (2003) studies the role of cohesion devices as textual constraints on relevance. The purpose of her study was to indicate how and which cohesive features assist the reader to realize the relevance and coherence of a text in the process of reading. The results indicated that the cohesive devices that associate with the realization of the discourse relevance and coherence of the text at each juncture pay only for those discourse meaning which obtain through the entire sentences, and larger parts of texts.

Ozono and Ito (2003) examine the effect of what they call it logical connectives and the semantic relations they signal on the comprehension of written text. Japanese university students studying English as a second language were the participants of the study. The research participants were divided into two groups according to their English language proficiency: low proficiency group and high proficiency group. Three conjunctives representing three semantic relations were used. Adversatives were represented by however, casuals by therefore, and illustrative by for example. The findings of the study showed that both high and low language proficiency groups benefited from the explicit presence of conjunctives in the texts used for testing their reading comprehension. However, it appeared that certain types of conjunctives are more useful to reading comprehension than others. For instance, unlike the high group, the low group tended to find however more difficult than for example.

Querol (2004) presents a description of how English literature makes use of substitution as a device of grammatical cohesion and the mechanism used in transferring them into the Spanish. The results showed that how the two different languages such as English and Spanish select different devices for the same linguistic situation. It was also found that among three different types of substitution

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identified, nominal and verbal substitution had a similar frequency, whereas there was a lower employment of clausal type. Among cohesive ties "one" was the most common one, "do" the most widely employed in general. Notice that "so" which has been presented as a practice of clausal substitution appeared twice as nominal type.

Yeh (2004) investigates the relationship of cohesion and coherence. In order to achieve a more thorough understanding of the relationship, he conducts the study from a contrastive linguistic point of view. To identify the relationship between coherence and cohesion, several Chinese texts were analyzed with a focus on the use of reference and conjunctive relations. The analysis showed that cohesion, as surface linguistic features, cannot account fully for the coherence of a text. Rather, underlying semantic relation as well as reader's perceptions of the text should be taken into consideration to construct a complete picture of discourse processing. Moreover, it was concluded: firstly, different languages may have different systems of cohesive devices. Devices in Halliday and Hasan's model, such as reference, lexical cohesion, and the conjunction, may be present in most languages. However the importance attached to various types of cohesive devices might be different. Secondly, it is safe to assume that a text's coherence is universal in the sense that the underlying semantic relations can be grasped by the reader / speaker with the knowledge of language as well as from other sources be it the application of the schemata or interpretation of illocutionary acts. In other words, the cohesion need not surface in the text in order to contribute to its coherence.

O' Reilly and Mc Namara (2007) investigates the impact of cohesion texts on students' reading ability. They also examined whether students' comprehension skill influence the relation between text cohesion and their domain knowledge. In this study, college students (N=143) read a high or a low cohesion text and replied text-based and bridging inference questions. The results showed that the benefit of low-cohesion text was limited to less skilled, high knowledge readers, whereas skilled comprehenders with high knowledge benefited from a high cohesive text.

Types of cohesive ties

Halliday and Hasan (1976) identify five types of cohesion: reference cohesion, substitution cohesion, ellipsis cohesion, conjunctive cohesion, and lexical cohesion. The first four types fall under the category of grammatical cohesion. Lexical cohesion on the other hand refers to relations between any lexical item and some previously occurring lexical item in the text, quite independently of the grammatical category of the items in question. For example, lexical cohesion can exist in noun magistrate and the verb judge. The five types of cohesion are explained below:

A. Reference cohesion

What distinguishes this special type of cohesion is the particular nature of the information that is to be retrieved, and the cohesion lies in the continuity of reference, by which the same thing comes into the discourse for the second time.

Personal reference

Personal reference is reference by means of function in the speech situation, through the category of

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person. Personal reference includes:

(a) Personal pronouns: I, Me, Him, she, Her, You, Us, They, Them, and It.

(b) Personal determiners: My, Mine, His, Hers, Your, Yours, Their, hers.

(c) Relative pronouns: who and which…

Demonstrative reference

Demonstrative reference is reference by means of location, on a scale of proximity.

The category of demonstrative reference includes:

(a) Determiners: This, There, that, and those.

(b) Demonstrative adverbs: There, Here, and then.

Comparative reference

Comparative reference is indirect reference by means of identity or similarity. Comparative reference includes:

(a) Comparative adjectives: Equal, same, identical, other, Different, more, better, etc.

(b) Comparative Adverbs: Differently, similarly, more, less, etc.

B. Substitution cohesion

Substitution cohesion consists of sense identity relation instead of a reference identity relation. It also has three subdivisions such as nominal substitution, verbal substitution and clausal substitution.

Nominal substitution

If the presupposed element is a noun phrase or noun the nominal substitution occurs. Look at the example below:

a) Can you give me a pen?

b) There is one on the desk.

The presupposing cohesion element is one.

Verbal substitution

In the case of verbal substitution, the presupposed element is a verb phrase or a verb. The presupposing element which the substitution is usually the word do and its various forms, such as does did and done. Look at the example below:

  All children like ice cream and my son does too.

Clausal substitution

When the presupposed element is a complete clause, there exists clausal substitution. The most frequent presupposing element affecting this type of substitution is so. For example:

Employees must come to work before 7:30 a.m. The manager says so.

So it replaces the whole sentence, employees must come to work before 7:30 a.m.

C. Ellipsis cohesion

Ellipsis cohesion refers to the case of absence of a word, a phrase or a clause whose meaning is understood. In other words, Ellipsis is simply defined as substitution by zero. There are three types depending on the syntactic category of the presupposed elements.

Nominal ellipsis

If the presupposed element is a noun phrase or noun which is actually absent from the context of discourse it is nominal ellipsis. As in:

These are my two cats. I used to have four.

The word cat has been omitted and can easily be understood or recovered from the context.

Verbal ellipsis

Verbal ellipsis occurs where a verb or verb phrase is presupposed, as in:

Teacher: have you done the homework?

John: yes, I have.

John's answer is elliptical in the sense that doing the homework is understood.

Clausal ellipsis

Clausal ellipsis occurs when both a noun or noun phrase and adverb phrase, is omitted. It is mostly seen in dialogue in yes/ no questions, as in the example below:

Mary: are you going to buy a new dress for my birthday?

Mother: yes.

Here the mother is affirming the entire clause you are going to buy a dress for my birthday. The whole clause may often be omitted, as in:

Henry: what grade did you get for French?

Paul: B

Since the whole clause has been omitted, Paul's answer constitutes a clausal ellipsis and not a nominal or verbal ellipsis.

D. Conjunctive cohesion

As Halliday and Hasan (1976, p.256) point out "conjunctive elements are cohesive not in themselves but indirectly, by virtue of their specific meanings; they are not primarily devices for reaching out into the preceding or following text, but they express certain meanings which presuppose the presence of other components in the discourse".

E.g. He took a cup of coffee after he woke up

The word "after" suggests a sequence, signaling that what is expressed in the first clause followed what is expressed in the second one.

Additive conjunction

Under the heading Additive we may include a related pattern, in which the source of cohesion is the comparison of what is being said with what has gone before.

e.g., Similarly, likewise, in the same way, and, or…

Adversative conjunction

The basic meaning of the adversative relation is contrary to expectation. The expectation may be derived from the context of what is being said.

e.g. Although, though, despite, however, nevertheless…

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Causal conjunction

Under the heading of causal relations are included the specific ones of result, reason, and purpose.

e.g. Hence, then, so, because, consequently, therefore, for this reason….

Temporal conjunction

It is a relation of sequence in time. The temporal relation may be made more specific by the presence of an additional component in the meaning as well as that of a succession in time.

e.g. Then, next, after that, just then, previously, at last, finally, at last..…

Lexical cohesion

The last type of cohesion according to Halliday and Hasan's (1976) classification is lexical cohesion. Despite reference, substitution, and ellipsis which are associated with syntactic elements, lexical cohesion has nothing to do with syntactic relations. Therefore, it is an open-ended and the most difficult cohesive type to define which is vocabulary-driven and based on lexical relations. Some of the relations which signal for lexical cohesion through their vocabulary are presented below:

1. By repetition of a phrase or word.

2. Synonymy (words which have similar meanings, e.g. well-known, famous)

3. Antonym (the relation of opposite meaning e.g. high, low, day, night)

4. Hyponymy (the semantic relation between a more general expression that includes some related specific relations e.g. flower and rose).

5. Collocation (group of words whose meaning relates to the same certain contents, e.g. car, gas, driver).

Young people act quickly. Old people take their time.

Here young and old are antonymous. They bear a relation of semantic contrast.

It is obvious that for discourse to be understandable and cohesive, language learners have to recognize who does what to whom when and where. Information about entities, people and objects, time, space and actions has to be carefully followed and coped with one segment of utterance to the next (Gullberg, 2006).

But one major reading difficulty ESL/EFL college students encounter is inability to recognize the connections among sentences in the text and EFL learners are less aware of cohesive devices while reading English texts (Chu, Swaffer, & Charney, 2002; AL-Jarf, 2001).

When we review the second language acquisition literature, we realize that lots of studies have considered the relation between cohesive devices knowledge and reading comprehension ability or the relation between cohesion and coherence within the text. In contrast with the previous studies, in this research we only consider a particular kind of grammatical cohesion and try to analyze it in detail. As we know the nominal substitution, verbal substitution and clausal substitution are recognized by substitutes such as one (s), the same, do (does, did, do, doing, done, to do), so and not. But on its true identification, we must also know not all uses of the above- mentioned substitutes express the presupposing items and they may be used in other contexts which express different meanings and have

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nothing to do with the cohesiveness of the text (Pandian & Assadi, 2010). So it will be a big and confusing problem for students to know how to distinguish these identical items with different functions in different sentences or contexts. On the other hand, concerning clausal substitution, we are also interested in realizing to what extent learners can use or apply their knowledge of clausal substitution in creating the substituted form of modal, reporting and conditional contexts. So this study is an attempt to investigate the following research questions:

1. Are Iranian intermediate EFL learners able to distinguish the correct items that imply substitution from incorrect ones?

2. Are Iranian intermediate EFL learners able to use their knowledge of clausal substitution elements (SO and NOT) in creating modal, reporting and conditional contexts?

2. Method

2.1 Participants

The participants who took part in this study were 80 (M = 40; F = 40) Iranian intermediate EFL students who were native speakers of Persian. The participants had no familiarity with any other foreign languages except English language. All students were majoring in English-Persian translation studying at Iranshahr branch Azad University. The age of participants ranged from 19 to 28 years old. The participants were selected from among a group of 120 EFL students by means of administering NTC's TOEFL test of language proficiency. The selected students were those with intermediate level of language proficiency. Finally, the students were randomly assigned into an experimental group and a control group.

2.2 Instrument

Two research instruments were used in this study. First a validated paper-based TOEFL test was administered at the beginning of the study to select the main subjects of the study as intermediate Iranian EFL learners. The second instrument employed by this study consisted of two measuring tests prepared as pre-post tests for the collection of data. In order to assess learners' ability to identify substitutions, a pre- post test was designed. Each version of the identification test involved 20 sentences. The participants were required to read each sentence and to decide whether it contained the substitution elements which made contributions to the cohesiveness of the text. Regarding the second research question, it included a pre- post production tests which only took into consideration clausal substitution elements (so and not) to assess learners' ability in creating the environment of modality, reporting and conditioning. The two versions of production tests consist of 15 sentences. The participants were asked to read each sentence and use the substitutes so and not while producing the above- said contexts. It should be mentioned that both of the identification and production tests were based on Halliday and Hasan's taxonomy of cohesive ties (1976) and also adopted from The ABC's of Functional Grammar by Pandian and Assadi (2010).

2.3 Data Collection and Analysis Procedure

This study was carried out in two phases. First, the participants were administered a pretest of substitution identification as a kind of cohesive devices. Subjects were asked to identify the cohesive items and underline or circle them. Moreover, they were asked to connect the items to their substituted part. The second kind of test was a pretest of production which required learners to use their knowledge of clausal substitution in creating modal, reporting and conditional sentences. In the second phase, the actual study was conducted. There was an instructional treatment and also an explanation of how we can reach at above mentioned contexts through using the clausal substitution elements for participants of the experimental group. The aim of treatment class was teaching a type of cohesive devices (substitution) on the basis of an operational definition of Halliday and Hasan (1976) followed by further working on some within text examples related to the taught material in each treatment session.

Generally, the teacher started each session in the experimental group as follows: first, each substitution type was explained and illustrated at the sentence level and some examples were used for more analysis and identification of it. Then students were assigned to practice the taught materials, by identifying them and connecting to their antecedent, substitute part in the short texts such as short stories. The teacher tried to show that students may have seen substitutes such as one (s), the same, do (does, did, do, doing, done, to do), so and not in other environment with different meanings.

This procedure was followed in each session of treatment classes for the experimental group. The treatment instruction ran for 12 sessions and the allocated time for each session was 30 minutes. There was no special treatment for the participants of control group concerning the explicit teaching of substitution unless some irrelevant practice, placebo, on some aspects of language with the same time allocation and the same number of sessions; for example, subjects were asked to read some passages and summarize the text they had already read.

Finally, participants of both experimental and control groups took post identification and production tests at the end of course of instruction. The content of the tests was based on the material taught for the experimental group as treatment. The allocated time for each test was about 60 minutes. Students' answers were marked by the researcher.

Some types of errors while identifying nominal, verbal and clausal substitutions will be illustrated. It should be mentioned that none of them will be related to the substitution elements.

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Table1. Different types of errors while identifying substitution elements

Error type	Examples
Nominal (one, the same)	
She made one very nice shirt. (Numeral)	
One must respect the rights of other people. (General pronoun)	
Reza is the tallest one in the class. (pronoun)	
The girl wanted a Cola. The boy asked for the same one. (reference)	

Error type	Examples
Verbal(do, does, did, doing, done, to do)	
The boy was doing his homework.	
I can't join you because I have lots of things to do.	
Jack did the accounts in his firm yesterday.	
Reza does not call me.	

Error type	Examples
Clausal (so, not)	
Ah, You have so many toys (Reference)	
He loved Amy very much. So he decided to marry her. (Conjunction)	
War brings about nothing but misfortune. That is so. (Truth)	
I told him over and over not to do such a silly thing.	

Three kinds of contexts including modal, reporting and conditioning ones which can be created through clausal substitution elements can be as below:

Table2. Different types of contexts

A :Can Ali buy a car?	
B :Surely he cannot buy the car.	**Surely not . (Modal)**
A: Are you going to your grandfather's house at the weekend?	
B: I think I am going to my grandfather's house at the weekend.	**I think so. (Modal)**
A: Will you lend me your car?	
B: I said that I will not lend you my car .	**I said no. (Reporting)**
You must come on time .The manager says you must come on time.	**The manager says so .(Reporting)**

Do you need help ? If you need any help, wait for me.	**If so, wait for me .(Conditioning)**
A: She will reject my proposal.	
B :If she doesn't reject your proposal, you won't need to revise it.	**If not, you won't need to revise it.(Conditioning)**

2.4 Design

The design of this study is true experimental because it includes three basic characteristics of true experimental designs. 1) a control group is present, 2) the subjects are randomly selected and assigned to the groups, and 3) a pretest is administrated to capture the initial differences between the groups. In this study there are two groups, the experimental group which received the specific treatment including the explicit teaching of substitution as a kind of cohesive device and the control group which did not. Here, the teaching of a particular type of cohesive device is the independent variable and improvement in the identification of nominal, verbal and clausal substitutions and production of modal, reporting and conditional contexts through clausal substitution are the dependent variables.

3. Results and Discussions

By conducting the study and in an attempt to answer the first research question, the following results were obtained from the performance of experimental and control groups in pre-post tests. The data collected came from the analysis of scores mean through T-TEST done with SPSS.

3.1 Statistical Analysis of Independent Sample t-test of Pretest

The data obtained from the pretest indicated a difference between the two groups' mean scores; the experimental group scored higher than the control group. The statistical analysis of the results of the pretest, and the group means comparison revealed that T.observed to be .85, with probability value: $P < .05$. It is clear that the value of T.observed does not exceed T.critical that is 2. Therefore, the difference between the two groups was not significant at $P < .05$. It means that the two groups turned out not to be significantly different at the beginning of the study.

Table 3. Statistical analysis of independent sample t-test of pretest

Groups	N	Means	St. Deviation	St. Error Mean	Sig (two-tailed)
Experimental	40	14.20	1.13	.17	.395
Control	40	14.00	.94	.14	.395
T-observed	.85				

3.2 Statistical Analysis of Independent Sample t-test of Posttest

As table 2 demonstrates, a clear difference between the means of experimental and control group in posttest can be observed.

Table 4. Statistical analysis of independent sample t-test of posttest

Groups	N	Means	St.Deviation	St.Error Mean	Sig (two-tailed)
Experimental	40	16.30	1.80	.28	.000
Control	40	14.30	1.27	.20	.000
T-observed	5.71				

The analysis of the results of posttest, and the group means comparison showed the T.observed to be 5.71 with the probability level of $P < .05$ and is much higher than T.critical 2. It means that there is a significant difference between the experimental and control group. Therefore, this significant difference between the experimental and control group can be attributed to treatment effect as the teaching of substitution.
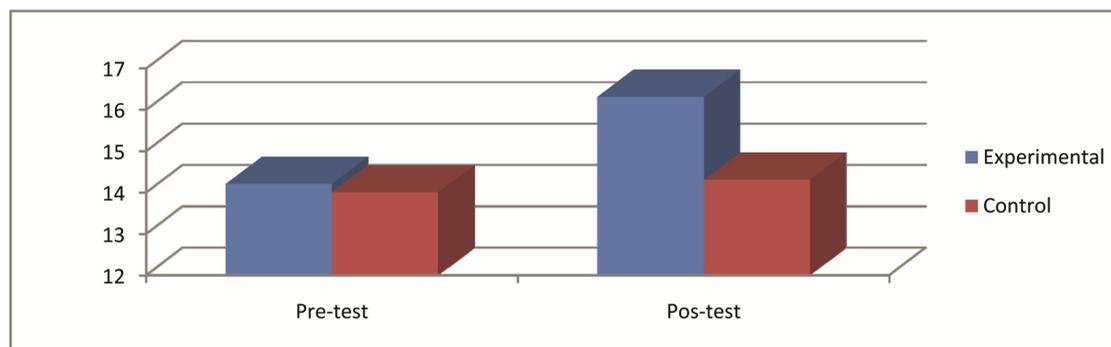

Figure 2. Mean score graph of identification test by the two groups

In an attempt to answer the second research question concerning the impact of explicit teaching of cohesive devices on creating modal, reporting and conditional contexts, following scores and results were obtained from the performance of experimental and control groups in pre-post tests.

3.3 Statistical Analysis of Independent Sample t-test of Pretest

The data obtained from pretest revealed a difference between the means of experimental and control groups. But the t-test analysis of means of the two groups showed the T.observed to be 1.01, with probability value: $P < .o5$. That is lower than T.critical 2. Therefore, based on this data analysis the difference between two groups is not significant at $P < .05$.

**Table 5. Statistical analysis of independent sample t-test of pretest**

Groups	N	Means	St.Deviation	St.Error Mean	Sig(two-tailed)
Experimental	40	14.30	1.33	.21	.314
Control	40	14.02	1.07	.17	.314
T-observed	1.01				

3.4 Statistical Analysis of Independent Sample t-test of Posttest

Now, let us consider the results of t-test analysis of posttest which is shown in table (4).

Table 6. Statistical analysis of independent sample t-test of posttest

Groups	N	Means	St.Deviation	St.Error Mean	Sig(two-tailed)
Experimental	40	16.15	1.77	.28	.000
Control	40	14.33	1.42	.22	.000
T-observed	5.03				
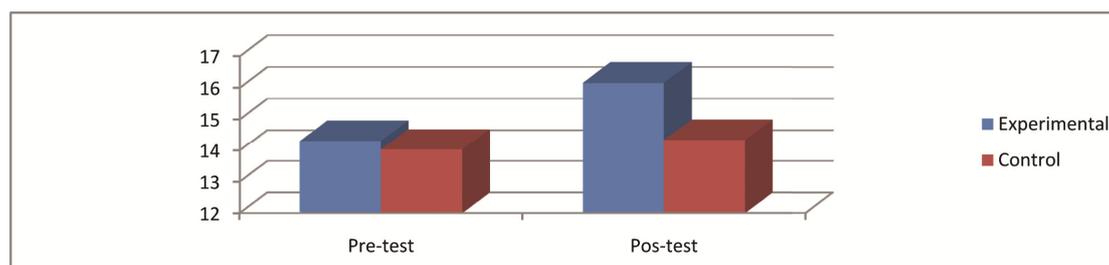
Figure 3. Mean score graph of production test by the two groups

The statistical analysis of t-test showed the T.observed to be 5.03 at a probability level of $P < .05$ that is much higher than T.critical 2. Thus, it can be concluded that there is a significant difference between the experimental and control group. Since posttest was administered after treatment, this improvement in subjects performance and accordingly the difference between experimental and control group can be attributed to treatment effect. The aim of the present study was to shed light on the problems that Iranian intermediate EFL learners may encounter in analyzing English texts in terms of dealing with nominal, verbal and clausal substitutions as a particular kind of grammatical cohesion. The main point concerning the first research question was due to the fact that not all uses of substitutes express the presupposing items. So this research aims at making learners able to distinguish the confusing substitution elements which do not play any role in the cohesiveness of the text (e.g. numeral, pronoun, etc.) from those which add contribution to the cohesiveness of the text. The findings showed that Iranian EFL learners can identify substitution as a kind of grammatical cohesion. Moreover, it was revealed that this ability can be remarkably increased as a result of treatment including explicit

teaching and practice on cohesive device recognition within a text. Concerning the second research question, it was revealed that the explicit teaching of substitution not only helps Iranian EFL learners to identify the above mentioned particular kind of grammatical cohesion but also makes them able to create three kinds of contexts which include modal, reporting and conditional environments through their knowledge of clausal substitution. The important point worthy to note is that by asking the second research question, we wanted to know whether learners are able to apply their knowledge of such a device in the process of different types of contexts creation.

Grammatical cohesion plays an inevitable role in the reading comprehension process. To highlight the role of grammatical cohesion, Yeh (2004) reported that developing awareness of cohesive devices can certainly aid an inexperienced reader to find his/ her own way to the writer's intention. Al-Jarf (2001) states that EFL learners' inability to construct a mental representation of the opinions included in a text, and also to maintain the global unity of the text as a whole may be related to certain textual elements including substitution, references and ellipsis. Moreover, Alavi and Kaivanpanah (2007) believe that lack of awareness of sentential constrains or organizational features of the text result in comprehension problems. In other words, learners' difficulties in comprehension of the meaning of the words and in grasping the overall meaning of the text may be partly attributed to the lack of such awareness. Thus one way for helping EFL learners to become better readers is to develop their awareness of the syntactic structure of the text. The present study has also concluded that EFL reader's perfect performance in analyzing textual factors, particularly dealing with cohesive devices, lies in the provision of enough, appropriate and long term practice and input. Developing an awareness of contained rhetorical patterns in a text will contribute to comprehension of that text.

Another point drawn from this study which is confirmed by the findings of Camiciottoli (2003) is that the explicit teaching of cohesive devices not only improves EFL readers' reading comprehension ability, but also sharpens the students' ability in identifying and recognizing the functions of such a device in a written text. If second language learners are expected to become fluent, successful readers, the particular instruction should be included in their courses. In the case of textual features we can ask learners to identify the examples of logical markers and recognize their functions. By paying enough attention to logical connectives, the learners will be able to recognize and analyze the rhetorical strategies and reasoning lines employed by the author of the text (Camiciottoli, 2003). Concerning the necessity of cohesive devices familiarity, Martinez (2002) claims that since discourse markers as a cohesive device facilitate communication, we can think that the lack of DMs in an L2, or their unsuitable use could prevent successful communication to a certain degree, or cause misunderstanding. L2 students must learn to signal the relations of their utterances to those which come first and go after. Therefore, in terms of communicative competence, L2 learners must acquire the proper use of DMs of the L2. Consequently, it is reasonable to imagine that those nonnative speakers who are knowledgeable in the use of the DMs of the L2 will be more successful in interaction than those who are not.

As the final note, the researcher hopes this study will be a good support for second language learning

and particularly reading comprehension skill and help teachers and students to be more active in language classes. Learners will be able to apply their knowledge of cohesive devices not only in reading skill but also in speaking and writing skills to have more fluent and accurate speakers, writers and successful readers. Teaching cohesive devices as textual factors can help EFL learners to activate their reading comprehension skill. In other words, a successful communication of any text depends highly on the appropriate use of cohesive and coherent devices.

3.5 Suggestion for Further Research

The findings of this study suggest a lot of possibilities for further research. One area of research that can be attempted is a comparative study of the performance of the students in cohesion at various levels of proficiency. Another recommendation is to investigate the impact of cohesive devices on other language skills such as writing in isolation or along with and integrated with reading skill. This study could be replicated with a larger subject sample in order to generalize the findings to a larger population. We can also use substitution as a kind of syntactic criteria in studies which try to help learners to become aware of the differences between comparative adjectives and adverbs with the identical forms but belonging to different grammatical categories (Radford, 2004).

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