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**THE IMPACT OF STRATEGY – BASED INSTRUCTION
PROPOSITIONAL SIMPLIFICATION ON IRANIAN INTERMEDIATE
EFL LEARNERS' READING COMPREHENSION ABILITY**

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ABSTRACT

The present investigation was an attempt to study the effect of strategy-based instruction of propositional simplification on Iranian EFL learners' reading comprehension ability. To that end, an OPT test was administered to 100 learners learning English language in Shokoh institute. Learners who scored between one above and below the standard deviation were selected for the study, because this study focused on intermediate learners. So 40 learners were selected for this study and they were divided into experimental and control group, each group contained 20 learners. Then a reading comprehension test was administered to both groups as a pre-test to take their initial knowledge of reading comprehension. The experimental group received treatment based on propositional simplification strategy instruction for ten sessions. However, the control group received no treatment. Finally both group sat for the post-test of the same reading comprehension test. The results computed and analyzed through SPSS (ANCOVA) and it was explored that propositional simplification strategy had a positive effect on Iranian EFL learners' reading comprehension ability.

Key Words: *Propositional Simplification, EFL Learners, Reading Comprehension*

INTRODUCTION

While reading is an undeniably complex process, it requires propositional recognition and comprehension at its most fundamental level (Koda, 2005 and Laufer, 1997). Grabe (2005) points out that propositional recognition of vocabulary and automaticity of word recognition for most of the words in the text (p.50) is central to an ESL reader's ability to comprehend a text under normal conditions. Additionally, much research has shown that as subjects demonstrate greater general propositional knowledge, their reading comprehension scores tend to increase.

While the importance of propositional simplification in L2 is well-established, many approaches exist that claim to facilitate the L2 reading process. Some view authentic or unmodified text as the best medium for L2 reader, others use methods of modifying text at the propositional levels. Still others create entirely new texts that are carefully composed using a limited propositional range of features.

In this chapter different topics were discussed. To show the importance and goal of the study, at first significance of the study was explained. The statement of the problem explained clearly the problems and difficulties of the EFL learner in reading comprehension and showed how these problems were improved. To fulfill the purpose of this study, research question was raised which was to see whether propositional simplification had any effect on reading comprehension ability of Iranian EFL learners and then hypothesis was formulated based on the research question. At the end of this chapter limitation of the study was discussed and explained. This research was done in limited areas and with limited learners.

Significance and Purpose of the Study

In the field of language learning, students are confronted with a great deal of reading tasks in the foreign language. Reading comprehension plays an important role at Iranian universities, it has also developed its roles in the Iranian educational contexts, and it is now a well-established area in the field of language teaching and learning in the country.

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Although students know the importance of learning reading and its great role on their academic studies, they feel reading text mostly seem challenging to them. Teachers can reduce this anxiety by using different strategies. Propositional simplification is one of these strategies. It would make them approach a reading task more enthusiastically. Yet, despite all the current researches demonstrating the important contribution of readers' background knowledge of words to reading comprehension, this factor is not being considered consistent in learner's reading comprehension. By considering the importance of reading text, the current study investigated the influence of propositional simplification on the performance of EFL learner's reading comprehension ability.

Statement of the Problem

In most EFL contexts, where students of English have few chances to contact foreigners, reading comprehension happens to be the most important skill to be developed. However, when students enter higher levels of education, they are unable to read and comprehend foreign text books. So it seems that there must be some fundamental problems in reading comprehension. Unfamiliar propositions for second or foreign language usually cause difficulty in processing texts which contain unfamiliar aspect of the English language. Proposition according to Hedge (2000) is one of the major components of reading ability with which L2 readers may experience difficulty. To enhance reading ability effectively it requires propositional recognition and comprehension at its most fundamental level. Propositions form the foundation from which a reader builds meaning at a sentence, paragraph and discourse level, no matter how many grammatical structures a reader has mastered, no matter how high a level of cognition that a reader operates at. If that reader cannot access the meaning of critical amount of propositions in a text, the reading propositions will be broken down. When subjects demonstrate greater general propositional knowledge, their reading comprehension scores tend to increase. According to a pilot study that I did in Shokuh institute, I found out many students have difficulty in comprehension of sentences because they don't know the meaning of propositions. To solve the problem, propositional simplification strategy instruction may be a reply to the need and problem of the students.

Young (1999) defines simplification as any modification designed to make text more accessible to a reader. However in the literature on simplification, it is often stated that simplification does not affect comprehension to a great extent. This leads to ignoring how, where and for whom the text are being simplified. The natural upshot is that the role of simplification on comprehension is denied. Therefore, this study aims at testing the effect of propositional simplification on reading comprehension by drawing criteria for propositional difficulty and simplification from the subjects for whom the text are being simplified.

Review of the Related Literature

Many studies have been conducted on reading instruction and reading strategies and the role they play in promoting reading comprehension. Bereiter and Bird found in 1985 that reading strategy instruction helps poor readers to overcome their difficulties in reading.

While reading is an undeniably complex process, it requires propositional recognition and comprehension at its fundamental level (Koda, 2005 and Laufer, 1997).

Grabe (2005) points out that propositional knowledge is central to ESL learners' ability to comprehend a text under normal conditions. Additionally, several researches have shown a correlation between propositional knowledge and reading comprehension scores in ESL learners (Koda, 2005). One of these researches has shown that as subjects demonstrate greater general propositional knowledge, their reading comprehension ability increases.

Actual evidence for the strength of simplification strategy lies in experimental studies. For instance, Long and Ross (1993) compared comprehension scores of L2 readers using three versions of the same text: authentic, simplified and elaborated versions. Long and Ross found that students who read linguistically propositional simplification scored significantly higher on multiple choice items meant to test comprehension than did those that read the authentic version. They also found that students who read the elaborated version did not score significantly better than those who read the authentic version.

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A later study conducted by Tweissi (1998) also found that simplification strategy positively affected students' reading comprehension. However, Tweissi found that it was the type of simplification and not the amount of simplification that played the most important role in assisting the students to understand materials.

MATERIALS AND METHODS

As it is said earlier, the present study is conducted to investigate the effect of propositional simplification strategy instruction on Iranian intermediate EFL learners' reading comprehension ability. So the methodology of the research is as follows:

Design of the Study

The design of the study was based on Quasi-experimental design which is a pre-test and post-test design.

Participants of the Study

The participants were 100 male and female Iranian EFL learners between the ages of 19 and 25 in Shokuh institute of Chalus. The subjects' scores on the OPT test were based on a consistent criterion for assigning participants into the proficiency levels. Those receiving scores one below the standard deviation were categorized as low-proficiency students, and those obtaining scores one above the standard deviation as high- proficiency students. So 40 students whose scores were between one below and above standard deviation were selected for the study. They were assigned into two groups, control and experimental groups. Both groups sat for the pre-test of reading comprehension in order to take the initial knowledge of reading comprehension ability. The experimental group received treatment based on propositional simplification strategy instruction. And finally both groups sat for the post-test which is the same reading comprehension test.

Three types of instruments were used in this study. The first type included OPT test which was used to ensure the learners be at the same level of proficiency and to make them homogenous. The second type was a reading comprehension test that was used as pre-test. The test consisted of ten questions that covered all of the details given in the text.

The third type of instrument included a reading comprehension test as a post- test.

Procedures

The following steps were taken in the course of the present investigation:

OPT Test

An OPT test was administered to the whole population of the participants and those falling between one above and below the standard deviation were selected for this study. This section yielded 40 learners. The purpose of this test was to make the learners homogeneous. Then subjects randomly divided into control and experimental group, each group contained thirty students.

Analyzing the Results: At the end of ten sessions a reading comprehension test was administered whose readability was computed using the fog index of readability. This test was administered to the whole participants as a post-test and the results were analyzed statistically.

RESULTS

Descriptive Statistics

Before starting the treatment, a test of OPT was employed to establish the homogeneity of the subjects in terms of language proficiency. It consisted of three parts: close tests, structure and vocabulary. Initially, 100 male and female students participated in the study. After administration of OPT test, 40 intermediate students whose scores were between 31 and 50 were selected. Then, they were randomly classified into two groups. One of them was considered as the control group and the other one as the experimental group. A descriptive statistical analysis was done on the collected data of OPT test. The results are shown in table 1.

Table 2 shows the number of students who took the pre-test and post-test. It should be mentioned that no one excluded.

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Table 1: Descriptive Statistics for the Proficiency Test

N	Mean	SD
100	32	10.32

Table 2: Number of Students Participated in Pre-test and Post-test

Case	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Pre-test Group	40	100.0%	0	0%	40	100.0%
Post-test Group	40	100.0%	0	0%	40	100.0%

The descriptive statistical analysis done on the collected data of pre-test and post-test is shown in the table 3.

Table 3: Descriptive Statistics for the Pre-test and Post-test

Group	Pre-test	Post-test
Experimental Mean	59.9	68.4
N	20	20
SD	4.8	4.7
Control Mean	58.45	58.1
N	20	20
SD	5.64	5.2
Total Mean	59.15	63.25
N	40	40
SD	5.216	7.121

Interpretive Statistics

Analysis of covariance (ANCOVA) is particularly appropriate when subjects in two or more groups are found to differ on a pre-test or other initial variable. In this case the effects of pre-test and/or other relevant variables are partialled out, and the resulting adjusted means of the post-test scores are compared. Through ANCOVA, differences in the initial status of the groups can be removed statistically so that they can be compared as though their initial status had been equated.

In this study, in order to investigate the research hypothesis “propositional simplification has no effect on Iranian EFL learners’ reading comprehension ability”, the differences between mean scores of pre-test and post-test of control and experimental group were calculated through ANCOVA.

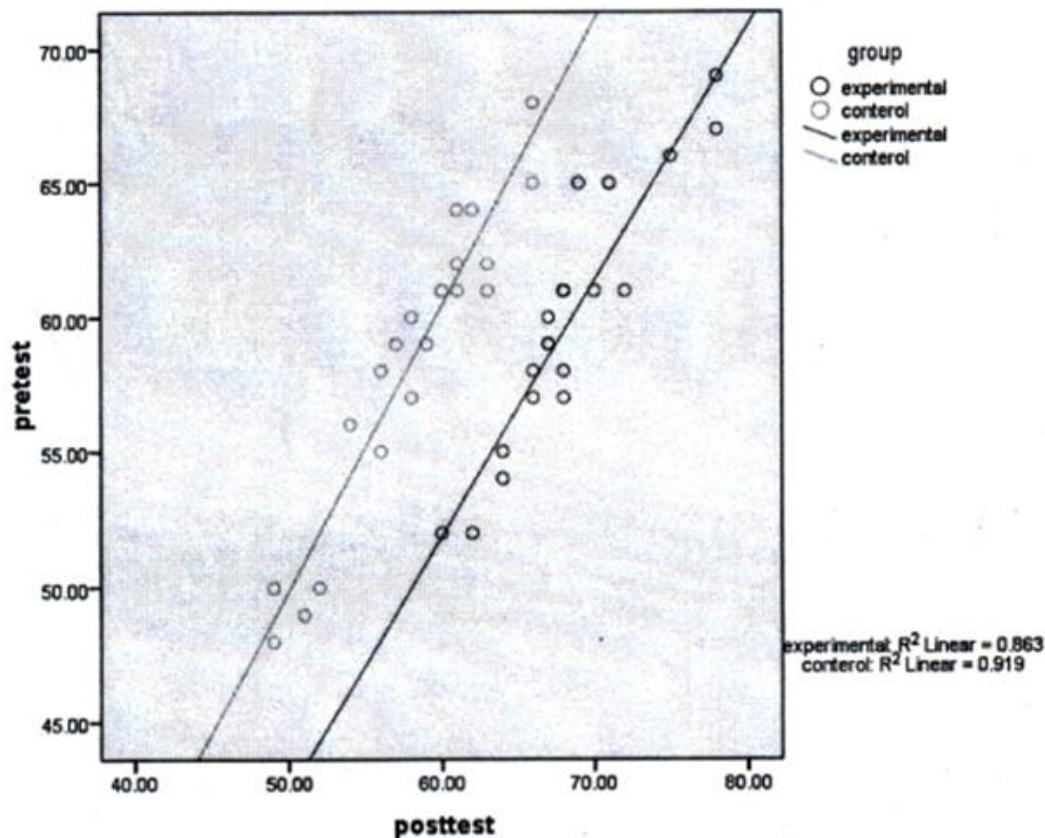
Before running ANCOVA, the following hypotheses were examined:

- Linear relationship between variables (pre-test and post-test)
- Equality of variances
- Homogeneity of regression
- The linear relationship between pre-test and post-test was examined through spread plot (1):

As graph(1) shows, because the regression lines are parallel, there is a linear relationship between the two variables, pre-test and post-test. It means that the relationship between the two variables in both groups is the same.

In order to examine the equality of variances, Levin’s Test of Equality of Error Variances of the dependent variable is equal across groups.

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Graph: Reading Comprehension Ability in Control and Experimental Group from Pre-Test

Table 4: Levin's Test of Equality of Error Variance

F	df1	df2	sig
.26	1	38	.61

According to table 4 the calculated F is not meaningful. So there is equality of variances and ANCOVA can be run.

The data in the table 5 are related to test of homogeneity of regression. Before running covariance, between- subject's effect of pre-test group should be investigated.

Table 5: Test of between – subjects' effects

Source	Type III sum of squares	df	Mean Square	F	Sig
Corrected model	1879.82	3	626.61	230.95	.00
Group (a)	17.86	1	17.86	6.6	.015
Pretest (b)	802.94	1	802.97	95.95	.00
Group pretest (ab)	.41	1	.41	.15	.7
Error	97.68	36	2.71		
Total	46200	40			

As table 5 shows, between subjects effect (ab) is not significant ($F=0.15$, $\text{sig}=0.7$). It shows that the data supports homogeneity of regression. Therefore, covariance should be run just for between – subjects

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effect of post-test and the group to show whether mean scores of the two groups are the same or not. The result of this analysis is demonstrated in table 6.

Table 6: Mean and Corrected Mean of Reading Comprehension Ability

Source	Post-test		Corrected Mean	
	M	SD	M	SE
Experimental	38.4	4.7	37.77	.36
Control	28.1	5.11	28.72	.36

Table 6 shows the corrected means of dependent variable of reading comprehension ability. The data demonstrate that the means of experimental group are upper than control group.

Sum of analysis of covariance (ANCOVA) of reading comprehension ability in experimental a control group after eliminating between-subjects effect is demonstrated in table 7.

Table 7: Sum of Analysis of Covariance

Source	Type III Sum of Squares					
Corrected Model	1879.415	2	939.71	354.48	.00	.95
Pre-test	818.52	1	818.52	308.76	.00	.89
Group	805.48	1	805.48	303.84	.00	.89
Error	98.08	37	2.65			
Total	46200	40				

As it can be seen, the corrected model ($F = .00$, $F = 354.48$) is statistically significant. The results ($F = 303.84$, $F = .00$, $Eta = .89$) show that there is a difference between two groups. It means that there is a significant difference between experimental and control group. As a result the null hypothesis “propositional simplification has no effect on Iranian EFL learners’ reading comprehension ability” was rejected, so it can be concluded that propositional simplification has an effect on Iranian EFL learners’ reading comprehension ability.

CONCLUSION

What are the implications for these findings? First, for textbook authors and technical writers, the implications are noteworthy. The way in which people read a text in their native language or in a foreign language should have an impact on how the text should be written.

The results are important for EFL teachers to apply. The results of this study imply that propositional simplification deserves more attention from teachers and material developers, at least at intermediate level. Moreover, there is an intuition that language is mainly its proposition, since if the reader knows every single proposition in the text; he might be able to comprehend it as he cannot work out the relationship between and within the different elements in the text. Moreover, the teacher must take care of using such propositional items in his discourse that are more or less tuned to the students’ current level of proficiency.

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