

The Impact of Reading Strategy Instruction in L2 (English) on Reading Performance and Attitude Toward Reading in L1 (Persian)

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Abstract

The importance of high level of competence in reading both in first language and English as the international language in EFL context is undeniable. This study investigates the effect of reading strategies instruction (RSI) in L2 (English), on reading comprehension and attitude toward reading in L1. To this purpose, 48 students of pre-intermediate proficiency level at the University of Mazandaran constituted the control and experimental groups. A reading comprehension test and questionnaire of attitude toward reading in L1 were distributed as pretest. After giving the experimental group the reading strategy instruction, the reading test and attitude questionnaire posttests were administered to all participants in the two groups. To analyze the data, test of univariate analysis of covariance (ANCOVA) was run. Analysis of data showed the experimental group outperformed the control group in both in reading comprehension and attitude toward reading. The findings show that RSI in L2, affects both reading comprehension and attitude toward reading in L1. It is recommended that teachers in reading courses keep in mind the important role of transfer, and use this to help improve reading comprehension and attitude toward reading in L1.

Keywords: Reading comprehension, Reading Strategies, Attitude, L1, L2.

1. Introduction

Kelly (2007) defines reading as an active process in which readers interact with text to restore the message intended by the author. Reading is a rapid process through which there is simultaneous integration of information in working memory to already existing knowledge (Grabe, 2002). Reading is not a naturally occurring skill at all, but rather a complex process that requires a careful and systematic instructional approach. The ability to read in a foreign language is all that many foreign language learners ever want to achieve. Good reading texts provide good models for writing, introduce new topics, and stimulate discussion (Richards & Renandya, 2002). A brief look at the current English textbooks in Iranian context indicates that reading has been a crucial skill for learners' success. Thus, in many second or foreign language teaching situations, reading receives a special attention.

During the process of constructing knowledge, active reader reflects on alternatives through the use of printed symbols. Reading comprehension is defined as "the process of simultaneously extracting and constructing meaning via interaction and engagement with written language, stimuli" (RAND Reading Study Group, 2002, p. 11). They further introduced the reader, the text, and the activity as the three key elements for reading comprehension. Regarding activity, the purposes, processes, and consequences in line with the act of reading are considered. The findings have borne out the key role these activities or reading strategies play in comprehension (Anderson, 1991; Oxford, 1990). Reading comprehension strategies based on Moreillon (2007) are defined as tools for successful readers to overcome the comprehension problems they might face in reading. Research shows that effective readers make more use of comprehension strategies (such as relating their background experience to the text, summarizing information, and drawing conclusion) and have a conscious control over the use of a range of different strategies while reading (McNamara, 2007).

There is growing interest in the role attitude plays in educational contexts. Pertaining to reading, Alexander and Filler (1976) describe attitude as "a system of feelings related to reading which causes the learner to approach or avoid a reading situation" (p. 1). The correlation between students' attitudes toward reading and their achievement in reading and comprehension has frequently been studied in the literature (McKenna, Kear, & Elsworth, 1995). These studies aim to scrutinize the close interaction between reading attitude and achievement in reading and comprehension, and put a great emphasis on the role of attitudes in achievement. The development of reading comprehension activities results in a change in learners' attitudes toward reading, too (Reis, McCoach, Coyne, Schreiber, Eckert & Gubbins, 2007). Thus, the existence of an interdependence of progress in reading comprehension and progress in development of a healthy reading attitude is highly confirmed. Reading attitude should be taken into account in regard to reading comprehension skills.

Research in bilingualism and second language acquisition supports the claim that knowledge of an L1 may have significant influences on L2 representations. The presence of such influences is unquestionable in all

aspects of language use, from overt linguistic form to the formulation of meaning (Jarvis & Pavlenko, 2008). This very important concept in the literature on bilingualism is called transfer. The term transfer originates from the field of psychology of learning which means imposing already learned patterns onto a new learning situation (Isurin, 2005). Transfer occurs when the existing knowledge, abilities and skills exert influence on the learning or performance of new or previous skills or tasks. In other words, when learning in one context with one set of materials impacts on performance in another context with different but related set of materials, then transfer has occurred. Early studies on transfer were inspired by the work of behaviorist psychologists (e.g., Thorndike, Pavlov, Skinner). Jarvis and Pavlenko (2008) categorized transfer into three particular directions as forward transfer (from an L1 to an L2), reverse transfer (from an L2 to an L1), and lateral transfer (from an L2 to an L3). This means that in an individual's mind two (or more) languages may affect each other simultaneously. Investigations into transfer in the use of both L1 and L2 have shown backward transfer in some levels of language: phonology (Flege, 1987; Flege & Eeftig, 1987), lexical-semantics (Caskey-Sirmons & Hickson, 1977; Pavlenko & Jarvis, 2000), sentence processing (Cook, Iarossi, Stellakis & Tokumaru, 2003), pragmatics (Cenoz, 2003; Su, 2001; Valdes & Pino, 1981). People who have more than one language in their mind switch between languages from time to time (Cohen, 1995). This phenomenon is known as 'bidirectional transfer' where the interaction between the two languages is two way (Pavlenko&Travis, 2002).

The purpose of this study is first to find out if reading strategy instruction in L2 has any effects on reading performance in L2. The second aim is to find out if there is any effect on attitude toward reading in L2, as a result of reading strategy instruction in L2. It is assumed that one way to expect students to pass the English courses as strategic readers who have a good attitude toward reading is to teach them reading strategies in L2. This makes them prepared for the real act of reading, both cognitively and attitudinally. Investigation of student attitudes and consideration of their perspectives will help design future EFL reading courses in such a way that they nurture student agency and create an environment conducive to quality learning experiences so as to increase their success in their academic pursuits.

There are several factors that cause students to become effective readers and read a lot. One is the knowledge and use of reading strategies which facilitates the process of comprehending a text. And the other is students' attitude toward reading. These two factors seem to have a bidirectional effect. Despite the significant role that these factors play in the success of learners, in the Iranian educational system, little or no attention has been paid to them, especially in the context of students' mother tongue, both for general and academic modes of reading. Most of the available researches on the effect of L1 on L2 or the reverse have focused on the transfer of the cognitive domains of language (e.g. reading strategies and reading ability). Yamashita (2004) examined the relationship between L1 and L2 reading attitudes, and learners' performance in L2 extensive reading and found that the affective domain of reading (attitudes) transfers from L1 to L2. Talebi (2012) studied the effect of reading strategy instruction in L2 on the strategic reading behavior (awareness and use of reading strategies) and general reading ability in L2 and L1. He found that the instruction had a significant impact on the strategic reading behavior as well as reading ability in L2. The interesting thing in the study was that he found these improvements in the cognitive domain in L2 would transfer to L1 (Persian) without any instruction in L1. However, these studies and some few more did not consider the attitudinal transfer of reading attitude (the affective domain) from L2 to L1. We still do not know if instruction of reading strategies in L2 will have impacts on reading ability and attitude toward reading in L2 and in L1 as a result of reverse transfer from L2 to L1. In the Iranian EFL context English language instructors have students who were not taught how to read strategically in their L1 (Persian), also and no instruction was given aiming at improving their attitude in their L1. However, they come to L2 classes. One way to expect them to pass the English courses as strategic readers who have a good attitude toward reading is to teach them reading strategies in L2. This makes them prepared for the real act of reading, both cognitively and attitudinally. In addition, as Iranian non-English major students have both general and specialized courses both in L2 and L1, it is important to know if reading strategy instruction in L2 will have the same effects on the reading ability and reading attitude of students L1. Therefore, the purpose of this study is first to find out if reading strategy instruction in L2 has any effects on reading performance in L1. The second aim is to find out if there is any effect on attitude toward reading in L1 as a result of reading strategy instruction in L2.

1.1 Research question and hypothesis

Based on the purposes of the present study, the following research question is addressed:

Q1. Does RSI in L2 have any effects on reading performance in L1?

H0. RSI in L2 has no effects on reading performance in L1.

Q2. Does RSI in L2 have any effects on reading attitude in L1?

H0. RSI in L2 has no effects on reading attitude in L1.

2 Methodology

2.1. Participants and design of the study

The participants of this study were students of two general English classes, mostly first year students at University of Mazandaran, each containing 28 and 33 students. They came from different fields of study including law, political sciences and basic sciences. After homogenization, 48 out of the 61 students were chosen for the purpose of this study; 25 in the experimental and 23 in the control group. Since random participation of students to the two groups was not possible, quasi-experimental design was opted.

2.2. Instruments

Since there was no reading comprehension test in Persian, the researcher decided to create a test on her own. This test consisted of three passages that were adopted from 'Bardasht Akhar' (2006), 'Yeki Bud, Yeki Nabud' (1921), and 'Peleh Peleh ta Molaghate Khoda' (1998) Each passage had 9 items that measured literal comprehension, inferential comprehension, reorganization, and vocabulary knowledge. The nature of the 27 items were the same for all passages. The test was shown to some experts in the field of Persian Language to comment and confirm its suitability for the current study. As there is no reading comprehension test in Persian, there is no objective difficulty formula and the researcher had to rely on experts' comment. Administering the test at the piloting stage, the reliability of the scores according to KR-21 formula was calculated to be .75. It is widely accepted to make use of a questionnaire employing a Likert-scale for measuring attitudinal variable. Along with the reading test, Yamashita (2004) attitude toward reading questionnaire was distributed. It was utilized to measure participants' attitude toward reading in English (L1). The 26 items of the questionnaire assessed both affective (i.e., feeling) and cognitive (i.e., evaluative beliefs) aspects of reading attitude. The reliability of the questionnaire was measured using KR-21 formula to be .78. The questionnaire was translated into Persian (participants' L1) with the purpose of better comprehension of items.

2.3. Procedure

A total of 61 students from two general English classes, majoring at different fields were chosen for this study. They were already assigned to two classes before the study began. On a random basis, one class was chosen as experimental and the other as control group. In the first step the test of reading comprehension in L1 was administered both as a means of homogenizing participants in terms of their reading proficiency in Persian and as pretest. 48 students whose scores on the reading test were between -1 and $+1$ Standard deviation on the normal distribution curve (i.e., 20-12; SD: 3.5; Mean:16.45) were involved in the study. Immediately after the test, the attitude questionnaire was administered as another pretest to measure of students' attitude toward reading in L1 before receiving strategy instruction.

Employing CALLA (Cognitive Academic Language Learning) method, reading strategies were instructed to the experimental group in ten sessions, as a treatment along with their regular classroom materials, but the control group were trained only their routine classroom materials that were just centered on learning grammar and vocabulary for reading comprehension, with no focus on reading strategies. In the CALLA model, first students background information is activated (preparation), then a strategy is introduced (presentation), and practiced (practice phase). Then students have time to evaluate the strategy and their performance (self-evaluation), and gradually, integrate and combine different strategies when they face reading obstacles (expansion phase). It is expected that this model helps students to become autonomous readers. As a final step, the reading test along with the attitude questionnaire was administered as posttest to measure changes in the participants' reading performance and attitude toward reading L1 as the result of strategy instruction.

3. Results

To address the two hypotheses of the study, as there was one independent and one dependent variable in each hypothesis, ANCOVA was run. Analysis of covariance was run to partial out the effect of extraneous variables. To use ANCOVA, a number of assumptions including level and measurement of the variables, normality, homogeneity of variance, and homogeneity of regression slopes must be considered. Therefore, all the assumptions were tested and successfully satisfied.

3.1. Hypothesis 1: RSI has no effects on reading performance in L1.

Table 1: Analysis of Covariance on the Effect of Reading Strategy Instruction in L2 on Reading Performance in L1

Dependent Variable: Posttest L1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	285.315	2	142.657	62.530	.000	.735
Intercept	40.406	1	40.406	17.711	.000	.282
Pretest L1	116.428	1	116.428	54.700	.000	.554
Group	73.710	1	73.710	32.309	.000	.295
Error	102.664	44	2.281			
Total	15123.000	48				
Corrected Total	387.979	47				

As presented in table 1, the effect of the covariate pretest L1 was significant on the dependent variable, posttest L1 ($F(1, 44) = 54.70, p = .000$). As the result of table 1 indicates, a remarkable difference between the two groups at the posttest stage is obvious ($p < .05$). Thus, the assumption that there is homogeneity in the scores of the participants after partialing out the effect of the pretests is rejected. According to the means of the scores in table 1, it could be concluded that RSI in L2 has enhanced reading performance in L1. As it could be noticed in the column of Partial Eta Squared in the table 1 above, 29.5 % of the change in L1 test scores ($\eta^2 = .295$) was due to the effect of RSI in L2. Larger values of partial eta squared indicate a greater amount of variation accounted for by the model effect, to a maximum of one. Therefore, the null hypothesis as RSI in L2 has no effects on reading performance in L1, was rejected.

3.2 Hypothesis 2: RSI has no effects on attitude toward reading in L1.

Table 2: Analysis of Covariance on the Effect of Reading Strategy Instruction in L2 on Attitude toward Reading in L1

Dependent Variable: Posttest attitude toward reading in L1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	19448.642	2	9724.321	714.314	.000	.969
Intercept	339.370	1	339.370	24.929	.000	.356
Pretest Attitude L1	64.696	1	64.696	4.752	.035	.096
Group	5287.381	1	5287.381	388.392	.000	.796
Error	612.608	45	13.614			
Total	211330.000	48				
Corrected Total	20061.250	47				

As presented in table 2, the effect of the covariate pretest L1 was significant on the dependent variable, posttest L1 ($F(1, 45) = 4.75, p = .035$). As the result of table 2 indicates, a remarkable difference between the two groups at the posttest stage is obvious ($p < .05$). Thus, the assumption that there is homogeneity in the scores of the participants after partialing out the effect of the pretests is rejected. According to the means of the scores in

table 2, it could be concluded that RSI in L2 has enhanced attitude toward reading in L1. As it could be noticed in the column of Partial Eta Squared in the table 2 above 79.6 % of the change in L1 test scores ($\eta^2=.796$) was due to the effect of RSI in L2. Larger values of partial eta squared indicate a greater amount of variation accounted for by the model effect, to a maximum of one. Therefore, the null hypothesis as RSI in L2 has no effects on attitude toward reading in L1, was rejected.

4. Discussion and Conclusion

The current study aimed at investigating the impact of reading strategy instruction in L2 on Iranian students' reading performance and attitude toward reading in L1. A significant difference was observed between the mean scores of the control and experimental groups from pretest to posttest on reading test and attitude questionnaire; In other words, the experimental group outperformed the control group in terms of reading performance and attitude toward reading in L1.

As mentioned in chapter one, there are three models for the existence of languages in one mind, namely the separation, the integration and the interconnection models. Talebi (2007) investigated the relationship between reading in two foreign languages, L2 (English) and L3 (Arabic), in one mind, after receiving reading strategy instruction. The results showed enhancement in reading strategy awareness and reading ability both in L2 and L3, implying the linked systems of languages in mind. Findings of the current study are in line with Talebi (2007) and support the interconnection model of languages in mind. The concept of positive effect of L2 on L1 is supported in Kesckes & Papp's (2000, cited in Cook, 2003) study. It was demonstrated that Hungarian children who know English significantly use more complex sentences in their L1 than those who do not. Talebi (2012) studied the effect of reading strategy instruction in L2 on the strategic reading behavior (awareness and use of reading strategies) and general reading ability in L2 and L1. He found that the instruction had a significant impact on the strategic reading behavior as well as reading ability in L2. The interesting thing in the study was that he found these improvements in the cognitive domain in L2 would transfer to L1 (Persian) without any instruction in L1. The findings of the above-mentioned studies are in line with the current study. This study revealed that the cognitive aspect of L1 is positively affected by L2, specifically in case of strategic reading behavior and reading ability. Moreover, the unique feature of the current study was demonstrating a positive transfer of affective aspects of L2 to L1, to be more precise, attitude toward reading. In other words, it can be implied that cognitive and affective aspects of languages are similarly related between the many languages in one mind.

The relationship between reading attitude and reading achievement is well established. Researchers have constantly found a link between positive reading attitude and higher reading achievement (Baker & Wigfield, 1999; McKenna et al., 1995; Wigfield & Guthrie, 1997). However, transfer of reading attitude was not given enough attention in the literature. Kamhi-Stein (2003) explores the relationship between L1 and L2 reading strategy use and affective factors, including readers' views of their home language and their beliefs about reading. Data were collected through think-aloud protocols, open-ended interviews, self-assessment inventories, and reading comprehension measures in Spanish (L1) and English (L2). The study revealed that participants' attitudes towards and beliefs about reading in L1, affected reading processes in both L1 and L2. To be more precise, those who appreciated L1, employed it in the process of decoding the L2 text, while those who trivialized L1, did not. Yamashita (2004) investigated EFL learners' L1 and L2 reading attitudes, using questionnaires to collect data. Four subcategories of reading attitude were specified (anxiety, comfort, value ascribed to reading, self-perception as a reader) and all were correlated between L1 and L2, showing the connection between L1 and L2 reading attitudes. In another paper, Yamashita (2007) showed that positive L1 reading attitude would probably result in the learners reading in L2 even in learners with low proficiency level. In other words, L1 reading attitude had strong impact on L2 reading attitude. These studies substantiate attitudinal transfer. Findings of the current study also are in conformity with the findings of the studies above. Moreover, the current study also proved that attitude can be transferred in a reverse fashion. The significance of reverse attitudinal transfer (reading attitude in L1) as a result of RSI in L2, cannot be overlooked. Reading strategy instruction in L2 to Iranian EFL learners can enhance their attitude toward reading as well as reading performance in L1.

5. Pedagogical Implication

Based on the results of this study, material developers are strongly recommended to design textbooks which can push learners toward strategic reading with the aim of training more autonomous and self-regulated readers, in the language which RSI is given and in any further language as a result of cross-linguistic transfer of reading strategies.

It can also be observed that reading strategy instruction in L2 influences attitude toward reading in L1 in a positive way. As might be expected, more positive attitude creates a more desirable reading experience, and encourages students to make more use of strategies to the extent they achieve quality reading skills. Therefore,

material developers and teachers are to incorporate reading strategy instruction in educational reading books and educational contexts. This can be very beneficial in EFL contexts like Iran where not enough attention is paid to the improvement of students reading ability before collage level.

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