



# Cross-Linguistic Transfer of Reading Ability: Evidence from the Role of Gender in L1 (Persian) and L2 (English) Interdependence



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## ABSTRACT

Gender has been underresearched in studies on interdependence between L1 and L2. This descriptive-survey study, intended put to the test interdependence between L1 and L2 reading among male and female students. To this purpose, 225 (male N=103 ; female N=122) non-English major students attending general English classes were distributed a reading strategy awareness (RSA) inventory in L1, Nelson test of general English proficiency (GEP) and a reading comprehension (RC) test in L2. Analysis of data showed a moderate correlation among these three variables both in male and female students; however, it was found that female students had higher mean scores on RSA, GEP and RC., reading strategy awareness had more contribution to L2 reading for the female students, and together, the two variables of RSA and GEP had more contribution to L2 reading for the female students. All in all, the study showed different results for interdependence between languages for the two genders as the findings showed stronger interdependence between L1 and L2 in female students rather than male students. As in cross language studies L1 has been shown to affect L2 learning, it is recommended that L2 teachers consider the role of gender in interdependence between L1 and L2.

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## 1. Introduction

Reading in EFL contexts is an important skill through which learners get the most amount of input for language learning. According to Chastain (1988, p. 216), “reading is a basic and complementary skill in language learning.” Cognitive skills interact with sources of knowledge, such as reading strategies to improve reading comprehension (Grabe, 2009). Reading strategies are defined by Urquhart and Weir (1998, p. 95) as “ways of getting around difficulties encountered while reading.” According to Pressley & Afflerbach, (1995) readers use more reading strategies when the text becomes more difficult to comprehend.

The importance of reading strategies and language proficiency in successful reading performance was emphasized in L2 reading research (e.g., Oxford, Park-Oh, Ito, & Sumrall, 1993). Studies show the interaction effects of lower (e.g., word processing) and higher (e.g., use of reading strategies) levels of processing for effective reading comprehension. As Perfetti & Hart (2001) stated failure in lower level processing short circuits higher-level processes. Walczyk (2000) also stated that failure in lower-level processing does not normally hinder successful reading comprehension. Talebi (2015) also emphasized that the high levels of strategy awareness and use as well as linguistic proficiency in L2 are the best possible scenario for a successful performance in reading comprehension tasks in L2.

One of the important phenomena studied in SLA research is the concept of language transfer. The interaction of languages in one's mind is a

complex phenomenon which makes transfer a controversial issue in applied linguistics (Ellis, 1994). In SLA studies, transfer was viewed differently. Negative transfer or interference considers L1 influence as an obstacle to L2 learning. However, as L1 was also found to facilitate L2 learning in areas where the two languages are similar, the term transfer was gradually used instead of the term interference. Therefore, transfer can be both negative and positive (Lado, 1957). Different theories were introduced which viewed language transfer phenomena from different perspectives.

Goodman (1973) contends the process of reading is much the same for all languages. According to Bosser (1991) if students are strategic in their L1, it is most likely that they transfer their L1 reading strategies to L2 reading tasks. Cummins (1979) proposed linguistic interdependence hypothesis (LIH) to explain about the relationship between languages in mind. LIH conceives that proficiencies in cognitively demanding tasks (e.g., literacy skills, abstract thinking and content learning) are common among languages and therefore, transfer cross-linguistically. Therefore, according to this hypothesis we can expect L1 reading skills and strategies to affect L2 reading comprehension. Studies showed a weak (e.g., Proctor, August, Carlo, & Snow, 2006) to a moderate (Baker, Stoolmiller, Good & Baker, 2011; Manis, Lindsey, & Bailey, 2004) correlation between students' L1 and L2 reading comprehension ability. Kim and Piper (2018) also reported that higher order cognitive skills are more prone to cross-language transfer. Coady (1979) asserted that foreign language reading is a reading

problem that readers have in their L1 and not a language problem. Alderson (1984) also stated that problems in L2 reading are more because of a low proficiency level in L2, and that it becomes more a reading problem at the higher levels of proficiency in L2.

Learner variables also predict second or foreign language learning success. Many studies investigated the effect of such factors on language learning. Gender is one of these factors. Swan (1993) showed that males boys were more talkative than girls. Examining the relationship between gender and the reading comprehension of three types of texts (including essay, history and short story) among Iranian EFL learners, Keshavarz and Ashtarian (2008) gave a reading test with a total of 24 multiple-choice items to Sixty-two EFL students (28 males and 34 females) and found that females, in general, performed better than males in comprehending the texts.

With respect to the ideas mentioned above, although many studies were conducted on the role of gender in L2 learning, and many cross-linguistic studies have investigated the interdependence between the first language and second language, to date no study has investigated the role of gender in interdependence between L1 and L2 in reading comprehension and predicting the contribution of reading strategies in L1 and general proficiency in L2 to reading comprehension in L2.

## 2. Literature review

### Cross-linguistic transfer

The concept of language transfer is very

widely used in SLA (Second Language Acquisition) studies. Transfer is defined as “using what is already known about language to assist comprehension or production” (O’Malley & Chamot, 1995, p. 199). In transfer studies, according to Jarvis (2000) the question is how, where, when and to what extent languages affect each other in the process of language learning. According to Contrastive Analysis (CA) hypothesis where the concept of language transfer was first introduced, certain elements in the learner's L1 hinder or facilitate L2 acquisition. According to behavioristic viewpoint of CA, where the two languages are different, negative transfer or interference, and where they are similar, positive transfer are expected to happen (Lado, 1957). However, CA primarily had a linguistic view to the concept of transfer and did not regard it as a complex psycholinguistic process. Later on, language transfer was just one of the five processes central to language learning along with the other four processes known as over-generalisation, transfer of training, strategies of second-language learning, and strategies of second language communication (Selinker, 1972).

Researchers began to re-examine the role of L1 in L2 learning from the cognitive perspective. Creative construction hypothesis which takes a cognitive perspective to transfer went to the opposite extreme and held a non-transfer view of L1 on L2. By giving evidence of universal grammar principles of Chomsky, Dulay and Burt (1973) regarded L2 acquisition as a developmental process in which L1 played no role and what the L2 learners do is to formulate hypotheses about the L2 system and finally match

them against input available to them. However, later on in 1995, Danesi proposed that both transfer, in the behavioristic perspective and creative construction, in the cognitive perspective are influential factors in the process of L2 learning and that the role of L1 on L2 learning should not to be neglected at all.

In cross-linguistic transfer studies, two hypotheses are widely known about the relationship between L1 and L2 reading ability, namely the linguistic interdependence hypothesis and the linguistic threshold hypothesis. These will be discussed below.

### **Interdependence between L1 and L2 in reading comprehension**

Reading is an important skill both in L1 and L2. Reading researchers have long recognized the relationship between reading strategies and effective reading in L1 and L2 (Jimenez, Garcia, & Pearson, 1996, Pearson & Fielding, 1991). Theories of language transfer emphasize the role of first language in second language development. When reading in L2, readers have access to their L1 literacy knowledge as a strategy to do reading tasks in L2 (Bernhardt, 2005; Koda, 2005, 2007). To read efficiently, a reader employs a range of strategies (e.g., skimming, scanning, guessing unfamiliar words, predicting information to come, etc.) (Grabe, 1991). Studies show that efficient readers are active while reading, use reading strategies flexibly, set goals for their reading, and use reading strategies consciously (e.g., Erler & Finkbeiner, 2007; Sheorey & Mokhtari, 2001). On the contrary, struggling readers usually use fewer strategies and their strategy use is not flexible. Therefore,

flexible use of strategies is a prime characteristic of effective readers and should be an instructional goal for every reading teacher (Lenski & Nierstheimer, 2002).

Studies show that reading strategies are teachable, and when taught, they help improve students' comprehension and recall of texts (Brown & Palincsar, 1982; Pearson & Fielding, 1991). Following investigations in L1 reading strategy instruction (e.g. Brown & Palincsar, 1982; Palincsar & Brown, 1984), many researchers attempted to examine the degree and type of strategies in L2 reading and their effects on reading improvement in L2 (e.g., Harris 2003; Jimenez, Garcia & Pearson, 1996). According to Taki (2016) EFL teachers should teach reading strategies to help students transfer strategies from their L1 to their L2 reading tasks.

Linguistic interdependence hypothesis is one of the widely known hypotheses about the relationship between L1 and L2. Cummins (1980) introduced the term Cognitive/Academic Language Proficiency (CALP) to refer to "those aspects of language proficiency which are closely related to the development of literacy skills in L1 and L2" (p. 177). Therefore, as L1 and L2 CALP are interdependent, development in L2 depend on level of development in L1.

According to LIH, as there is a common underlying cognitive proficiency between L1 and L2, L1 reading strategies transfer to L2 (Cummins, 2016). This underlying cognitive proficiency common between languages, therefore, will free the learner from relearning the concepts, skills and strategies in L2 (Pae, 2018; Cummins, 2017; Cummins, López-Gopar, &

Sughrua, 2019). However, a threshold or minimum level of L2 language proficiency is required before L1 reading strategies transfer to L2 (Cummins, 1979). Short-circuit hypothesis (Clark, 1979) and linguistic threshold hypothesis (LTH) (Bernhardt & Kamil, 1995) were introduced to show L2 readers need to cross a certain level of linguistic threshold in L2 in order to transfer L1 reading strategies to L2. Therefore, low knowledge of L2 will short circuit transfer of reading strategies from L1 to L2.

Alderson (1984) raised an interesting issue by asking if the source of problem in foreign language reading is in L2 language proficiency (i.e., the orthographic, phonological, lexical, syntactic, and discursial knowledge that are specific to L2 and required to process L2) or in L1 reading ability (i.e., strategies or higher level mental operations such as analyzing, predicting, inferencing, and retrieving relevant background knowledge, which are operative universally across languages.). Alderson (1984) further added reading problem in L2 is both language problem and reading problem, but at lower levels of L2 proficiency it is more a language problem and at the higher levels it is more a reading problem.

LIH was supported in several studies (e.g., Dressler & Kamil 2006; Genesee, Geva, Dressler, & Kamil, 2006; Nakamoto, Lindsey, and Manis, 2008). With a sample of 282 Spanish-speaking English language learners, Nakamoto, Lindsey, and Manis (2008) found that Spanish (L1) reading comprehension had significant correlation with English (L2) reading comprehension. Chuang et al. (2012) studied the correlation in reading ability between Mandarin

and English in a sample of 30,000 grade 9 students and found a correlation of 0.79 between the two variables. They also found that L1 (Chinese) reading accounted for more than 60% of the variance in L2 (English) reading. Studying the relationship between reading comprehension in Dutch (L1) and English (L2) Schoonen, Hulstijn and Bossers (1998) found strong correlations between the two variables among Dutch 8<sup>th</sup> and 10<sup>th</sup> graders.

Many studies were conducted to find out if L1 reading ability contributes more to L2 reading comprehension or L2 general proficiency. Hacquebord (1989) found that 55% of L2 reading ability was accounted for by L2 proficiency. Bernhardt and Kamil (1995) also found L2 proficiency accounted for 30% to 38% of the variances in L2 reading, while L1 reading ability accounted for 10% to 16%. Phakiti (2008) found reading strategies explained between 11% and 30% of L2 reading in English. Bossers (1991) found out that among Turkish learners of Dutch, though both L1 reading and L2 proficiency contributed significantly to L2 reading, L2 proficiency contributed more to L2 reading than L1 reading ability, and when a relatively high level of L2 proficiency was achieved, L1 reading ability was more significant.

### **Gender**

Many factors affect successful reading comprehension (such as activating background knowledge, knowledge of grammar and syntax, awareness and use of cognitive reading strategies, etc. (Koda, 2007). In language transfer studies different variables such as language typology (Proctor, August, Snow, & Barr, 2010), types of

language skills (Proctor, August, Carlo, & Snow, 2006), and contextual factors, such as language exposure (Proctor, August, Snow, & Barr, 2010; Verhoeven, 1994) might affect interdependence between languages. Biological traits are important factors in human behavior. Among the many variables that affect L2 reading, gender is one of the factors that deserves more attention in L2 reading research (Qanbarnejad & Vahdat, 2017). According to schemata theory, males and females are likely to have a greater comprehension achievement with texts which sound masculine and feminine, respectively (Shah Mohammadi, 2011). Brantmeier (2004) found that females recalled more ideas from text than males and scored higher on the multiple-choice questions. However, some studies reported no significant differences between males and females in reading comprehension. For example, Yazdanpanah (2007) studied reading comprehension among 187 intermediate-level students in Cyprus. The test had three passages two of which were male-oriented and one was gender neutral. Componential analysis of the results showed that males were better at scanning, referential questions, and matching titles with paragraphs and, on the contrary, females were better at identifying main ideas, text coherence questions and guessing meaning from context. Overall analysis showed no significant difference between males and females in reading comprehension. Hosseini Asgarabadi, Rouhi and Jafarigohar (2015) investigated the effect of gender on reading comprehension and reading strategy use in descriptive and narrative macro-genres among a total of 50 EFL intermediate male and female students. They reported no

statistically significant difference in reading comprehension in the two macro-genres between males and females.

However, studies reached different conclusions on the effect of gender on reading comprehension suggesting that there is a need for more research into the role of gender in L2 reading comprehension (Bügel & Buunk, 1996; Yongqi, 2002). According to Brantmeier (2004), “only a small number of L2 reading studies have been conducted where gender is examined in the procedures and analysis and the findings reported in these studies are inconsistent.” (p.4)

### **3. Rational and Purpose of the current study**

Although studies generally found evidence for cognitive/academic interdependence between languages, the question is not whether transfer occurs or not. In fact, we need to find out how much, under what conditions and in what contexts transfer occurs (Bernhardt, 2005).

According to researchers (e.g., Prevoo, Malda, Emmen, Yeniad, & Mesman, 2015; Proctor, August, Snow, & Barr, 2010; Verhoeven, 1994) it would be oversimplifying not to consider the contribution of a myriad of other factors that possibly affect the relationship between L1 and L2. The interdependence hypothesis was regarded as too general as it failed to take account of individual differences in cognitive ability (Geva & Ryan, 1993). Maghsoudi, Khodamoradi, and Talebi (2020) also suggested that other researchers consider the moderating role of gender in investigating interdependence between L1 and L2.

However, our hypothesis in the current study is that it is likely that gender is likely to affect the relationship between L1 and L2 reading. The current study will shed more light on the role of gender in the contribution of L1 reading ability and L2 proficiency to enhancing L2 reading comprehension. Therefore, the following questions are put forward:

- Q1.** Is there any correlation between reading strategy awareness (RSA) in L1, GEP (general English proficiency) and reading comprehension (RC) among male students?
- Q2.** Is there any correlation between RSA, GEP and RC among female students?
- Q3.** Do RSA in L1 and GEP predict performance on RC in L2 for male and female learners, similarly?
- Q4.** Do RSA in L1 and GEP at two high and low levels contribute to RC in L2 similarly for both the Boy and Girl groups?

A null hypothesis has been proposed for each question.

## 4. Method

### Participants

The current study was conducted at the University of Mazandaran. The 225 participants of the study (male N=103; female N=122) were non-English major students from faculties of Chemistry, Humanities and Social Sciences, Physics, Mathematics, and Law. Students were attending the 3-credit General English course and the main focus in this course at the University of Mazandaran is to improve reading comprehension. The range of age of the students in this study was from 19 to 26.

## Instrumentation

### Test of reading comprehension in English

In order to assess the reading comprehension ability of the participants, the 28-item test of reading comprehension in English developed by Zabihi (2015) was employed.

Day and Park (2005) introduced six types (namely, literal comprehension, reorganization, inference, prediction, evaluation, personal response) of reading comprehension questions to be utilized by teachers and material developers. In the development to the reading test, Zabihi (2015) employed the first three types of comprehension questions as they were more objective for scoring purposes. Literal comprehension concerns an understanding of the direct meaning of the text. Reorganization also concerns an understanding of the literal meaning of the text, but it is more complex than literal comprehension questions. In Reorganization students should move to a more holistic, global view by relating together information collected from various parts of the text for more comprehension. To answer inference questions, as the answer to this type of question is not explicitly stated in the text, students should use a combination of the literal comprehension of the text with their knowledge and intuitions. Finally, the researchers added vocabulary questions to test students understanding of difficult words in context. Without knowing a word and its structure, finding its meaning is to a great extent difficult.

The test contained four passages and for each passage seven questions were developed. Eight items of this test measured literal comprehension

(items 1, 2, 8, 9, 15, 16, 22, 23), 4 items inferential comprehension (items 3, 10, 17, 24), 4 items reorganization (items 4, 11, 8, 25), and 12 items vocabulary knowledge (items 5, 6, 7, 12, 13, 14, 19, 20, 21, 26, 27, 28). This test was piloted with 15 students and the reliability of the test was measured at the piloting stage by using the K-R21 formula which was 0.79. After presenting the test to two experts in ELT the passages of this test were considered gender neutral and suitable for the purposes of this study. 40 minutes time was allotted to the students to answer the questions.

### **English proficiency test**

Nelson test (series 400 B) of proficiency was adopted and distributed among the participants. It consisted of different sections including two multiple-choice cloze passages, vocabulary, grammar, and pronunciation. However, based on the purpose of the study the pronunciation section was not used in this study. At the piloting stage the test was administered to 15 similar students from each gender. Its reliability through the K-R21 formula turned out to be 0.67 for male students and 0.73 for female students. 35 minutes time was determined at the piloting stage to be enough for this test.

### **Reading Strategies Inventory**

To measure students' awareness and use of strategies while reading academic materials,

MARSI (Metacognitive Awareness of Reading Strategies Inventory) (Mokhtari & Reichard, 2002) was employed. It was translated into Persian which is the first language of the participants to make sure the participants would understand the items without any difficulty. The

accuracy of the translated version was verified by three experts in TEFL. In the final draft, items translated ambiguously were corrected. MARSI is composed of 30 items and falls into three broad categories, including Global Reading Strategies, Problem-Solving Strategies and Support Reading Strategies. Full description of the psychometric properties and the theoretical and research foundations of the instrument can be found in Mokhtari & Reichard (2002). The instrument was given to 30 male and female students of a general English course, in the faculty of basic sciences at the University of Mazandaran to measure the internal consistency reliability coefficient. The obtained results using the Cronbach's alpha formula was 0.74 and 0.81, for male and female students, respectively.

## **4. Procedure**

This study is descriptive and correlational in design. The procedure taken in order to collect the data of the current study is as follows. In order to trigger strategic reading behavior, firstly, the students were given a Persian reading test whose score was not used in data analysis for the aforementioned reason. Soon after, the reading strategy questionnaire was distributed to the participants to assess the students' strategic behavior while reading texts of general content in L1. As students had two sessions each week, the next session they were given the English reading comprehension test. Finally, in the following session, the students were given the proficiency test.

The collected responses were coded by numerical values into SPSS, version 25. Descriptive statistics including mean and



standard deviation of variables were analyzed for male and female students to figure out the overall and category wise pattern of the variables. ANOVA and Correlation and regression analyses were used to answer the research questions.

## 5. Results

Descriptive statistics of the data in tables 1 and 2 indicate the means and standard deviations of the measures for the male and female students.

Table 1. Means and Standard Deviations of the Measures for male students

|  | N   | Min | Max | Mean  | SD     |
|--|-----|-----|-----|-------|--------|
| Reading Strategy Awareness in L1 (RSA) | 103 | 25  | 95  | 61.40 | 14.145 |
| General English Proficiency (GEP)      | 103 | 7   | 19  | 11.27 | 2.661  |
| Reading Comprehension in L2 (RC)       | 103 | 5   | 21  | 11.46 | 3.435  |

Table 2. Means and Standard Deviations of the Measures for female students

|  | N   | Min | Max | Mean  | SD     |
|--|-----|-----|-----|-------|--------|
| Reading Strategy Awareness in L1 (RSA) | 122 | 36  | 93  | 64.48 | 14.411 |
| General English Proficiency (GEP)      | 122 | 5   | 20  | 11.86 | 3.353  |
| Reading Comprehension in L2 (RC)       | 122 | 4   | 20  | 11.71 | 3.631  |

In comparison with male students in descriptive statistics, female students had higher mean scores for GEP and RSA and RC. Furthermore, by looking at the standard deviations of the groups, we discern some apparent differences. The results indicate that female students had higher standard deviation scores on RC and GEP and RC.

What follows tests the research hypotheses.

**H0s 1 & 2:** There is no correlation between RSA, GEP and RC for male and female students.

The correlation matrix of the variables for the male students is displayed in Table 3. All the correlation coefficients are statistically significant ( $p \leq 0.01$ ). They are all relatively moderate. The correlation is 0.517 between RSA and GEP, 0.429 between RC and RSA, and 0.464 between RC and GEP measures.

Table 3. Correlation Matrix for all the Variables for male students

|                                   |             | GEP | RSA     | RC      |
|-----------------------------------|-------------|-----|---------|---------|
| General English Proficiency (GEP) | Correlation | 1   | 0.517** | 0.464** |
|                                   | Sig         |     | 0.000   | 0.000   |
| Reading Strategy Awareness (RSA)  | Correlation |     | 1       | 0.429** |
|                                   | Sig         |     |         | 0.000   |
| Reading Comprehension (RC)        | Correlation |     |         | 1       |
|                                   | Sig         |     |         |         |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix of the variables for

female students is displayed in Table 4. All the

correlation coefficients are statistically significant ( $p \leq 0.01$ ). They are all relatively moderate. The correlation is 0.569 between RSA

and GEP, 0.466 between RC and RSA, and 0.589 between RC and GEP measures.

Table 4. Correlation Matrix for All the Variables for female students

|                                   |             | GEP | RSA     | RC      |
|-----------------------------------|-------------|-----|---------|---------|
| General English Proficiency (GEP) | Correlation | 1   | 0.569** | 0.589** |
|                                   | Sig         |     | 0.000   | 0.000   |
| Reading Strategy Awareness (RSA)  | Correlation |     | 1       | 0.466** |
|                                   | Sig         |     |         | 0.000   |
| Reading Comprehension (RC)        | Correlation |     |         | 1       |
|                                   | Sig         |     |         |         |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Therefore, the first and second research hypotheses stating there is no correlation between RSI, GEP and RC in male and female students was rejected as the correlation between the three variables for both groups was relatively moderate.

**H0 3:** RSA and GEP predict performance on RC in L2 for male and female learners, similarly.

To test the third research hypothesis, the RSA and GEP scores of both male and female students were regressed against their RC scores. The results of multiple linear regression analyses for male and female students are shown in table 5 and 6, respectively.

The result of multiple linear regression analysis for the male students is as follows. In model 1 (the first model presented in table 5 in the first column) GEP was the sole predictor, accounting for 21% of RC score variance (adjusted  $R^2=0.207$ ). When RSA was introduced to the regression equation in model 2, the regression weight for GEP remained significant ( $T > 1.96$ ,  $B=0.330$ ,  $P=0.001$ ). RSA also added significantly to the prediction of RC with  $R^2$  change of 0.25 and ( $T > 1.96$ ,  $B=0.258$ ,  $P=0.011$ ). Both RSA and GEP emerged as significant variables (factors) in predicting RC. Together, the two variables accounted for 25% of shared variance in RC.

Table 5. Results of linear regression for the male students

| Model         | B              | SE             | $\beta$<br>(std) | T              | Sig.           | Df    | R     | R <sup>2</sup> | Adj<br>R <sup>2</sup> | F      | Sig.F<br>change |
|---------------|----------------|----------------|------------------|----------------|----------------|-------|-------|----------------|-----------------------|--------|-----------------|
| 1- GEP        | 0.598          | 0.114          | 0.464            | 5.258          | 0.000          | 1,101 | 0.464 | 0.215          | 0.207                 | 27.641 | 0.000           |
| 2- GEP<br>RSA | 0.426<br>0.063 | 0.129<br>0.024 | 0.330<br>0.258   | 3.292<br>2.579 | 0.001<br>0.011 | 2,100 | 0.514 | 0.264          | 0.249                 | 17.919 | 0.000           |

1. Predictors: (Constant), GEP

2. Predictors: (Constant), GEP, RSA

The result of multiple linear regression

analysis for female students is rather different. In

model 1, (the first model presented in table 6 in the first column) GEP was the sole predictor, accounting for 34% of RC variance (adjusted R<sup>2</sup>=0.34). When RSA was introduced to the regression equation in model 2, the regression weight for GEP remained significant (T>1.96,

B=0.478, P=000). RSA also added significantly to the prediction of RC with R<sup>2</sup> change of 0.36 and (T>1.96, B=0.194, P=0.03). Both RSA and GEP emerged as significant variables (factors) in predicting RC. Together, the two variables accounted for 36% of shared variance in RC.

Table 6. Result of linear regression for the female students

| Model         | B              | SE             | $\beta$<br>(std) | T              | Sig.           | Df    | R     | R <sup>2</sup> | Adj<br>R <sup>2</sup> | F      | Sig.F<br>change |
|---------------|----------------|----------------|------------------|----------------|----------------|-------|-------|----------------|-----------------------|--------|-----------------|
| 1- GEP        | 0.637          | 0.080          | 0.589            | 7.976          | 0.000          | 1,101 | 0.589 | 0.346          | 0.341                 | 63.619 | 0.000           |
| 2- GEP<br>RSA | 0.518<br>0.049 | 0.096<br>0.022 | 0.478<br>0.194   | 5.413<br>2.190 | 0.000<br>0.030 | 2,100 | 0.610 | 0.372          | 0.361                 | 35.215 | 0.000           |

Therefore, the third hypotheses stating that RSA and GEP predict performance on RC in L2 for male and female students similarly, was rejected as gender changes contributions of the independent variables on the dependent variable, differently.

**H0 4:** RSA in L1 and General English proficiency at two high and low levels contribute to L2 RC similarly for both the Boy and Girl groups.

In order to divide participants into high and low groups, the GEP mean score of all male and

female participants were calculated by dividing the total number of Girl and Boy students. The obtained mean score was 11.53. In both groups those whose scores were below and above the mean score were considered as low and high proficiency level students, respectively. In other words, those who scored lower than 11.53 were considered as the low group of GEP, while those who scored higher than 11.53 were considered as the high group, in Boy and Girl groups.

To test the fourth H0 for the Boy and Girl groups, first a descriptive statistics of data is provided in Tables 7 and 8.

Table 7. Means and SDs of variables of the low and high levels of GEP for Boy group

| Group     | Variables | Mean   | SD     |
|-----------|-----------|--------|--------|
| Low (97)  | RC        | 10.498 | 2.487  |
|           | RSA       | 52.927 | 11.023 |
|           | GEP       | 9.2887 | 1.4574 |
| High (87) | RC        | 14.103 | 2.693  |
|           | RSA       | 69.287 | 12.626 |
|           | GEP       | 13.586 | 1.8079 |

Table 8. Mean and SDs of variables of the low and high levels of GEP for Girl group

| Group     | Variables | Mean   | SD     |
|-----------|-----------|--------|--------|
| Low (86)  | RC        | 9.279  | 2.973  |
|           | RSA       | 61.651 | 14.107 |
|           | GEP       | 9.186  | 1.4431 |
| High (71) | RC        | 13.169 | 3.985  |
|           | RSA       | 70.774 | 12.296 |
|           | GEP       | 14.957 | 2.4227 |

A regression analysis was run, where RSA and GEP are the independent variables, and RC is the dependent variable.

Results of regression analysis of the two Boy groups (high and low groups) are presented in tables 9 and 10, respectively.

Table 9. Results of Linear Regression and ANOVA for Boy low GEP Group

| Model        | Beta | t     | p    | Adj R <sup>2</sup> | F      | p    |
|--------------|------|-------|------|--------------------|--------|------|
| RSA          | .451 | 4.549 | .000 | .264               | 18.251 | .000 |
| GEP-Low (97) | .136 | 1.366 | .175 |                    |        |      |

Table 10. Results of Linear Regression and ANOVA for Boy High GEP Group

| Model         | Beta | t     | p    | Adj R <sup>2</sup> | F     | p    |
|---------------|------|-------|------|--------------------|-------|------|
| RSA           | .407 | 4.042 | .000 | .161               | 9.281 | .000 |
| GEP-High (87) | .067 | .668  | .506 |                    |       |      |

As the results in tables 9 and 10 show, the role of RSA was significant, explaining about 26 percent (B=.45, T>1.96, F=18.251, P<0.01) and 16 percent (B=.40, T>1.96, F=9.281, P<0.01) of variances of RC for the low and high groups, respectively. Yet, the role of GEP (both in high and low groups) in predicting RC was non-significant (T<1.96, P>0.05, B=.067 & B=.136).

However, for the Girl group the result was

different. The role of RSA for the low and high groups was insignificant (T<1.96, P>0.05, B= .13 & B=.07). Additionally, the role of GEP for the low group was non-significant (T<1.96, B=.21, P>0.05). The contribution of GEP was rather significant for high group (B=.36, T>1.96, P<0.05, F=6.28). It accounted for 13% of shared variance of RC. (see tables 11 and 12)

Table 11: Results of Linear Regression and ANOVA for Girl Low GEP group

| Model        | Beta | t     | p    | Adj R <sup>2</sup> | F     | p    |
|--------------|------|-------|------|--------------------|-------|------|
| RSA          | .131 | 1.165 | .247 | .063               | 3.857 | .025 |
| GEP-Low (86) | .217 | 1.922 | .058 |                    |       |      |

Table 12: Results of Linear Regression and ANOVA for Girl High GEP group

| Model         | Beta | t     | p    | Adj R <sup>2</sup> | F     | p    |
|---------------|------|-------|------|--------------------|-------|------|
| RSA           | .077 | .640  | .525 | .131               | 6.280 | .003 |
| GEP-High (71) | .360 | 2.999 | .004 |                    |       |      |

Therefore, the fourth hypothesis stating ' RSA in L1 and General English proficiency (at two high and low levels) contribute to L2 RC similarly for both the Boy and Girl groups' was rejected for both groups.

## 6. Discussion and conclusions

Analysis of data showed moderate correlations between RSA in L1, GEP and RC in L2 in both male and female groups. In addition, both RSA and GEP emerged as significant variables in predicting RC in both male and female students. However, some critical differences were recognized between male and female students. According to data analysis, a) female students had higher mean scores on RSA, GEP and RC.; b) reading strategy awareness accounted for 34% of L2 reading comprehension variance for the female students while the obtained result was 21% for male students; and c) together, the two variables of RSA and GEP accounted for 36% of shared variance in RC in female students while the obtained result was 25% for male students. All in all, results are more in favor of the female students than male students. These findings are in line finding in the following studies though the nature of this study differed from them. Keshavarz and Ashtarian (2008) gave a reading test with a total of 24 multiple-choice items to Sixty-two Iranian EFL students (28 males and 34 females) and found that females, in general, performed better than males in comprehending the texts. Brantmeier (2004) found that females recalled more ideas from text than males and scored higher on the multiple-choice questions.

After dividing the participants into low and high proficiency levels, interesting findings emerged. Results showed that the role of RSA was significant for male low and high proficiency level students and insignificant for the female high and low proficiency level students. The

results are a little different for the role of GEP. In fact, the role of GEP was insignificant in predicting RC for both high and low male groups as well as for the low female group. However, the role of GEP was significant in predicting RC for high female group. These finding also show inconsistency in the power of contribution of the independent variable (i.e., RSA and GEP) to the dependent variable (RC) considering the gender effects. This study showed, if we include level of proficiency as a moderating variable, an inconsistent pattern is observed in the degree of contribution of GEP and RSA to L2 reading comprehension. These findings are in line with finding in Yazdanpanah (2007). Yazdanpanah (2007) studied reading comprehension among 187 intermediate-level students in Cyprus. Componential analysis of the results showed that males were better at scanning, referential questions, and matching titles with paragraphs and, on the contrary, females were better at identifying main ideas, text coherence questions and guessing meaning from context. However, studies reached different conclusions on the effect of gender on reading comprehension suggesting that there is a need for more research into the role of gender in L2 reading comprehension (Bügel & Buunk, 1996; Yongqi, 2002). According to Brantmeier (2004), “only a small number of L2 reading studies have been conducted where gender is examined in the procedures and analysis and the findings reported in these studies are inconsistent.” (p.4) Daughy and Long (2005) also assert that few studies focused on gender as a source of explanation for L2 acquisition.

Cummins (1979) proposed linguistic

interdependence hypothesis (LIH) to explain about the relationship between languages in mind. LIH conceives that proficiencies in cognitively demanding tasks (e.g., literacy skills, abstract thinking and content learning) are common among languages and therefore, transfer cross-linguistically. Therefore, according to this hypothesis we can expect L1 reading skills and strategies to affect L2 reading comprehension. Many variables including learner-related (for example, language proficiency, amount of target language exposure and use, language mode, linguistic awareness, age, educational background, and context) and language-related variables (language typology, frequency of use of linguistic features, word class and morphological transfer) affect cross-linguistic transfer (Murphy, 2003).

LIH was criticized as it seems to oversimplify the relationship between L1 and L2 by failing to consider a broad range of factors that moderate the relationship between L1–L2 (e.g., Prevoo, Malda, Emmen, Yeniad, & Mesman, 2015; Proctor, August, Snow, & Barr, 2010; Verhoeven, 1994). No study, to date, has investigated the role of gender in putting to the test LIH. This study is very innovative as no study has ever even mentioned the possible effects of gender on cross-linguistic transfer. The pedagogical implication of the findings of this study is that teachers in EFL contexts regard the effects of gender differences on interdependence between languages, in general. In particular, reading teachers are encouraged to consider the significant role of gender in reading success in L2, and the effects that it has on the degree of contribution of RSA in L1 and GEP to L2

reading.

Studies show that reading strategies are teachable, and when taught, they help improve students' comprehension and recall of texts (Brown & Palincsar, 1982; Pearson & Fielding, 1991). Following investigations in L1 reading strategy instruction (e.g. Brown & Palincsar, 1982; Palincsar & Brown, 1984), many researchers attempted to examine the frequency and type of strategies in L2 reading and their effects on reading improvement in L2 (e.g., Harris 2003; Jimenez, Garcia & Pearson, 1996). According to Taki (2016) EFL teachers should teach reading strategies to help students transfer strategies from their L1 to their L2 reading tasks. However, we would like to add that all these efforts should happen considering gender effects.

According to threshold hypothesis a minimum level of L2 language proficiency is required before L1 reading strategies transfer to L2 (Cummins, 1979). This study showed the pattern of the contribution of RSA and GEP to RC in L2 is different in male and female students at two proficiency levels. As LIH does not pay any attention to gender as a moderating variable, pedagogically, we need to take into consideration the effect of gender in defining relationship between different languages in mind and design the syllabus, develop the materials, and even evaluate the course and the learning outcome in L1 and L2, based on gender difference. In addition as RSA in L1 and GEP are effective variables in L2 reading success, reading teachers are recommended to be aware of gender differences in development of these contributing variables.

Language transfer studies cannot present a

comprehensive picture of the relationship between languages unless they take into account a myriad of other factors that can speed up or hinder the relationship. Among these many factors, individual differences play a significant role in defining the interdependence between languages. One criticism raised against the interdependence hypothesis in transfer studies was that it was regarded as too general as it failed to take account of individual differences in cognitive ability (Geva & Ryan, 1993). Even some researchers (e.g. Castilla, A. P., Restrepo, M. A., & Perez-Leroux, 2009) argued more for the predictive power of individual differences in interdependence between languages than mere

linguistic transfer. This reflects a need to further document the effects of individual differences (including gender) on the construct of LIH.

Due to the fact that factors associated with individual differences are great in number, this study managed to only include gender as a potential moderator to LIH. A large number of other variables (e.g., learning style, and learning motivation) pertaining to individual differences might be considered in future research on LIH to further document changes in patterns of interdependence across languages. In so doing, longitudinal studies that consider patterns of change in interdependence across different time intervals might be found helpful.

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## Appendices

### A: Reading Comprehension Test in English

#### Black holes, Mysteries of the Sky

How many things can you see in the night sky? A lot! On a clear night you might see the moon, some planets and thousands of sparkling stars.

You can see even more with the telescope. You might see stars where before only saw dark space. You might see that many stars look larger than others. You might see that some stars that look white are really red or blue. With bigger and bigger telescopes, you can see more and more objects in the

sky. And you can see those objects in more and more detail. But scientists believe that there are some things in the sky that will never see. We won't see them with the biggest telescope in the world, on the clearest night of the year. That's because they're invisible. They are the mysterious dead stars called black holes. You might find it hard to imagine that stars die. After all, our Sun is a star. Year after year, you see it up in the sky, burning brightly, giving us heat and light. The Sun certainly doesn't seem to be getting old or weak. But the stars do burn out and die after billions of years. As a star's gases burn, they give off light and heat. But when the gas runs out, the star stops burning and begins to die.

As the star cools, the outer layers of the star pull in toward the center. The star squashes into a smaller and smaller ball. If the star was very small, the star ends up as a cold dark ball called a black dwarf. If the star was very big, it keeps squashing inward until it's packed together tighter than anything in the universe. Imagine if the Earth were crushed until it was the size of a tiny marble. That's how tightly this dead star, a black hole, is packed. What pulls the star in toward its center with such power? It's the same force that pulls you down when you jump- the force called gravity. A black hole is so tightly packed that its gravity sucks in everything- even light. The light from a black hole can never come back to your eyes. That's why you see nothing but blackness. So the next time you stare up at the night sky, remember, there is some in the sky than meets the eye! Scattered in the silent darkness are black holes \_ the great mystery of space.

1. Which of the following statements is NOT a fact?
  - A. Black holes are dead stars.
  - B. Black holes have gravity.
  - C. Black holes are invisible.
  - D. There is nothing as mysterious as a black hole.
  
2. What happens AFTER a star dies?
  - A. It becomes invisible.
  - B. It falls to Earth.
  - C. It burns up all of its gases.
  - D. It becomes brighter and easier to see.
  
3. According to the article, what causes a star to die?
  - A. As its gases run out, it cools down.
  - B. It collides with other stars.
  - C. It can only live for about a million years.
  - D. As it gets hotter and hotter, it explodes.

4. What does gravity cause to happen?
  - A. It causes that the star become bigger.
  - B. It causes the star to pull in toward the center.
  - C. It causes that the star shed more light.
  - D. It causes the star to look red.
  
5. What is the synonym for the word mysterious in line 7?
  - A. Ordinary
  - B. Bright
  - C. Strange
  - D. Common
  
6. What is an antonym for the word Weak in line 9?
  - A. Strong
  - B. Tired
  - C. Big
  - D. thin
  
7. What is the word force in line 16 closest in meaning to?
  - A. Weight
  - B. Power
  - C. Favor
  - D. Strong

### The Bear against the Chipmunk

Long ago, the Earth was covered in darkness. None of the creatures living there knew what daylight looked like. One day, all of the animals of the forest gathered together in a clearing. They wondered if it would be better to remain in darkness, or if it would be better to also have light. Deer, Chipmunk, Raccoon, Wolf, Bear and many other creatures climbed to the top of highest mountain. The mountain stood so tall that there were no trees on its top, and it was covered only with rocks. Millions of stars blinked in the dark sky overhead. The biggest and most powerful

animal in the forest was the bear, and he was the first to reach the mountaintop. Bear stood on the highest peak, looked out over the forest below, and argued for remaining in darkness. He said that the creatures of the forest would be able to sleep better in darkness because there would be no light to keep them awake. Most of the other animals were afraid, and they agreed with Bear. Raccoon said that he did not mind the darkness because he was so smart he could find plenty of food, even in the dark. Wolf was easy to please, too. She didn't mind the darkness because she could howl in darkness or in light.

But one animal did stand up to Bear. Chipmunk, the smallest of the animals, argued that it would be better to have both light and dark. Chipmunk was very clever. As Bear continued to argue for darkness, she made many good arguments for light.

Slowly, the night passed. Bear grew tired of talking, but chipmunk chattered on and on, as she had all of the energy in the world. As the other animals dropped off to sleep, one by one, Chipmunk kept arguing. Finally, the first sunrise ever seen by animals appeared over the top of the mountain. They woke up and were amazed by what they saw. Chipmunk began to dance from rock to rock. Bear became angry because he didn't get his way. He roared loudly and ran after Chipmunk. He chased Chipmunk all the way down the mountain. Bear was fast, and he reached out his giant paw to grab Chipmunk. Chipmunk got away, but no before Bear managed to search her back with his long claws. And that is why, to this day, you can see stripes on Chipmunk's back!

**8. Where does the story take place?**

- A. In a barn
- B. on an island
- C. Near a lake
- D. On a mountaintop

**9. What did the other animals do while Chipmunk was arguing with the bear?**

- A. They stated their ideas
- B. They went back to jungle.
- C. They felt sleep
- D. They played together.

**10. It can be inferred from the passage that the bear is...?**

- A. A good listener
- B. Used to getting his way.
- C. Unsure about what he wants.
- D. Well-liked by the other animals.

**11. Which one of the animals was concerned about sleeping more than others?**

- A. Chipmunk
- B. Wolf
- C. Raccoon
- D. Bear

**12. The word smart in line 9 is closest in meaning to?**

- A. Sharp
- B. Fast
- C. Clever
- D. Stupid

**13. What does chatter in line 14 mean?**

- A. Argue
- B. Move slowly
- C. Laugh
- D. Speak quietly

**14. What does grab in line 18 mean?**

- A. To hug
- B. To dance with
- C. To catch
- D. To talk to

## Maggie and the Earthquake Experience

Maggie had never experienced an earthquake before, only prepared for it. As long as she could remember, preparing for earthquake was routine at school. Her family as well had made plans in the event of a natural disaster. Living on the west coast of the United States was earthquake country. However, it was not the same. Today Maggie was home alone. Her mind focused on her parents and what could be happening to them. Maggie knew her mom would be driving home on the busy, congested freeway. Her mind was preoccupied with preparing supper for Maggie's dad. Maggie's dad was due to arrive at the airport. He was coming home a two-week business trip. Maggie arrived home from school at the regular time. She was grabbing a snack from the almost bare pantry, when she felt it. First just a tremor, then the violent shaking. Maggie quickly scurried under the large, oak table in the dining room. The sounds of breaking glass and the crashing of numerous items was deafening. The table remained intact, and Maggie hugged herself in fear. Her mind focusing on her parents and what apparent danger they might be in. After what seemed like an eternity the earthquake appeared to be over. Maggie could hear the sound of water rushing below her in the basement. The smell of natural gas was present in the air. Maggie knew where the main water valve was located. Dad had shown her where it was and how to turn it off. Slowly and cautiously she came out from under the table.

The once tidy ranch home was almost unrecognizable. Walls had toppled over and electric sparks were shooting from the outlets. As Maggie approached the open basement door she should see the steps were still intact. Carefully

holding the handrail she was made her way down into the dark basement. While still on the steps she felt the water rising and rising. Placing her feet firmly on the floor Maggie felt a sudden surge of pain as a large ceiling beam hit her head and shoulder. She fell unconscious onto a pile of storage boxes.

**15. How long was Maggie's dad trip?**

- A. Two days
- B. Forty days
- C. Two months
- D. Fourteen days

**16. Where was the sound of water coming from?**

- A. It was from the bathroom
- B. It was from the basement
- C. It was from the kitchen
- D. It was from the toilet

**17. It can be inferred from the passage that.....?**

- A. The earthquake damaged gas pipes
- B. Maggie was injured during the earthquake
- C. Maggie could successfully stop water
- D. Maggie had her snake before earthquake

**18. How did Maggie know what to do during an earthquake?**

- A. She had read about it.
- B. Her friend had learned her
- C. She learned it at school
- D. She had experienced an earthquake before

**19. What does the word congest in line 5 mean?**

- A. empty
- B. round
- C. tall
- D. Crowded

20. What is an antonym for the word eternity in line 10?

- A. death
- B. Everlasting
- C. small size
- D. happiness

21. What is the meaning of the word intact in line 15?

- A. untouched
- B. Injured
- C. Contacted
- D. Damaged

### The Haunted House

I'm going to tell you about my Aunt Helen's house. It's not her main house, that's in the city. No, this house is by the lake. There was a small town by the lake called Miller's Ford, but all the people moved away when the fishing and mining stopped about sixty years ago. But the house stayed, of course. My Aunt Helen uses that house as a vacation home and she goes there for a few weeks every year to relax.

But staying in that house isn't a relaxing experience. I think the house is haunted! I think there's a ghost there from many many years ago. Helen says I'm silly and I've got an overactive imagination. But there are many things that happen in that house that cannot be easily explained.

One day, shortly after getting up, I went to find my Aunt Helen to say "good morning" and I hear her taking in a room that she usually never uses. I think it used to be the nursery of the house when Miller's Ford was a busy town in the 19<sup>th</sup> century. I listened at the door and could hear Helen reading something out, or perhaps she was dictating a letter. I couldn't hear any other person in the room with her so it wasn't a normal conversation. I didn't want to

disturb my aunt, so I went back downstairs and went to make breakfast in the kitchen, which I ate on the porch that overlooked the lake. It was a beautiful sunny morning, half an hour bread and later, I heard my aunt's car arriving. She had been to the local store to buy some milk. I couldn't believe it! "What are you looking so shocked for?" She asked. I thought you were in the old nursery, working on your letters, Auntie," I replied. "I never go to that room," she said. "I haven't been in that room for fifteen years.' Other things like that happened over the next few visits I made to that house and I grew to dislike it very much. Then, one day in my local library,

I found a story in an old newspaper with the title "The Constant Babysitter". The story was that a baby had died in one of the houses by the lake at Miller's Ford and the babysitter was blamed, a woman of 37 who was a family friend and had offered to look after baby. But she spent all the time in the kitchen writing her letters and didn't know that someone had climbed in the baby's window and taken her. The baby was never found. The woman killed herself through depression after the baby's disappearance and local people then said her ghost stayed very close to where the baby was left by the parents in the nursery. I never went back to that house, despite my Aunt Helen's many invitations.

22. Where was the narrator's aunt's house?

- A. Near a jungle
- B. In the mountains
- C. By the lake
- D. On the coast

23. Who took the bay in the story?

- A. A friend of the babysitter
- B. She died of an illness
- C. The babysitter
- D. none of the above

**24. From the passage it can be inferred that.....?**

- A. The narrator spent every holiday in his aunt house
- B. Police could find the missing baby
- C. Miller’s Ford was a crowded place
- D. The narrator was afraid of his aunt’s house

**25. Why did people leave Miller’s Ford?**

- A. Because of the haunted house
- B. Because of lack of food
- C. Because of its poor economy
- D. Because of bad climate

**26. What is the antonym for the word busy in line 9?**

- A. Crowded
- B. Full
- C. Quite
- D. Lively

**27. What does the word disturb in line 11 mean?**

- A. Speak to
- B. Trouble
- C. Surprise
- D. Sadden

**28. The word was Blamed in line 19 is closest in meaning to.....?**

- A. was encouraged
- B. was found responsible
- C. was arrested
- D. was helped

**Appendix B: Test 400 B**

**Choose the correct answer. Only one answer is correct.**

“I can’t understand ....1.... ” Mark Said. “The couple had lived in this house for a long time. Their relatives lived next door to them and in another ..2... Hadley, the ...3..... called in to see them five minutes after the postman delivered a

letter. But they had already disappeared.”

The house ....4..... had .....5..... surprises for Mr Bolton. It was exactly as he had imagined it. ....6..... in the hall and front room, but the kitchen and dining room were clearly used ...7.... And possessed .....8..... Someone without much money, but ....9..... nice things, had lived there. He or she – and he thought it was probably she – had been generous, too .....10..... her efforts to save, if the packets of little things obviously bought at the door were anything to go by. The thin detective .....11..... wandered through the house. There was no sign of flight, packing, .....12..... violence. He looked at everything but .....13..... seemed to interest him was a photograph .....14..... when the couple had got married. It was an ordinary picture but he ...15... it. Nora looked rather frightened, and Alex, the husband, although he seemed determined, had a worried expression ...16.... Smiled confidently. “I don’t think Hadley is the sort of man who imagines things,” Mark said. “When he says he felt the couple had been in the house that morning ....17..., I believed him. But here’s another photograph of alex. He ....18... someone I knew in the army, ....19.... in normal circumstances but ....20..... quickly if necessary.” “They seem ....21.... just after the postman called,” Bolton said. “I wonder if they won the football pools and the news of their win ....22.... in the letter. They may have gone away quickly away in case ...23....perhaps Alex knew his wife was generous and ....24.... a decision ....25.... the money with her relatives.”

- 1) A: that which happened
- B: that which did happen
- C: what did happen
- D: what happened



- 2) A: house nearby  
B: near house  
C: facing house  
D: house in the way
- 3) A: wife brother  
B: brother wife  
C: wife's brother  
D: brother's wife
- 4) A: by its own    B: as itself  
C: for itself    D: itself
- 5) A: little    B: a little  
C: few    D: a few
- 6) A: It wasn't much furniture  
B: there wasn't much furniture  
C: there weren't many furnitures  
D: there weren't many furnitures
- 7) A: a great deal  
B: a big lot  
C: much  
D: the most of the time
- 8) A: its proper character  
B: a character of its own  
C: their proper character  
D: a character of their own
- 9) A: which liked  
B: who liked  
C: what liked  
D: to whom liked
- 10) A: in spite of  
B: although  
C: nevertheless  
D: however
- 11) A: with the glasses of horn rims  
B: in the glasses of horn rims  
C: with the horn-rimmed glasses  
D: of the horn-rimmed glasses
- 12) A: or    B: nor  
C: but    D: neither
- 13) A: the only thing that  
B: the only thing what  
C: the single thing what  
D: the only which
- 14) A: done    B: made  
C: caught    D: taken
- 15) A: did a careful study of  
B: made a careful study of  
C: did a careful study from  
D: made a careful study from
- 16) A: The whole of the relative  
B: All relatives  
C: The relatives all  
D: The relatives they all
- 17) A: as happy as never  
B: as happy as ever  
C: so happy as never  
D: so happy as ever
- 18) A: remembers me of  
B: reminds me of  
C: remembers me to  
D: reminds me to
- 19) A: enough calm  
B: so calmly  
C: calm enough  
D: just calmly
- 20) A: able for acting  
B: was able to act  
C: capable to act  
D: capable of acting
- 21) A: to leave  
B: to be leaving  
C: to have left  
D: that they left

- 22) A: was                    B: were  
C: it was                  D: they were

- C: get  
D: arrive

- 23) A: the rest of the family found out  
B: the rest of the family would find out  
C: the others of the family found out  
D: the others of the family would find out

- 27) A: shall have      B: will have  
C: has                  D: must have

- 24) A: should do  
B: should make  
C: had to do  
D: had to make

- 28) A: hadn't taken  
B: wouldn't have taken  
C: weren't taking  
D: wouldn't take

- 25) A: for not sharing  
B: in order not to share  
C: so as not to share  
D: not to be shared

- 29) A: dressing  
B: to dress  
C: being dressed  
D: my dressing

**Choose the correct answer. Only one answer is correct.**

- 30) A: must have told me  
B: ought to tell me  
C: had to tell me  
D: should have told me

**On the main road**

“Slow down, darling. You're driving much too fast.”

“I know. But by the time we ....26..... to the church, the marriage service .....27..... started. If you .....28..... such a long time to get dressed, we'd have been there by now. I finished .....29..... an hour before you did.”

“It's not my fault. You ...30... we were in a hurry.”

“Now there's a police car behind us. It's signaling. I .....31..... stop.”

“would you .....32..... me your driving licence, sir? You realize that you were driving at a hundreds miles an hour, don't you?”

“No, officer, I .....33..... Oh, well, I suppose I was. We're going to a wedding. You see.”

“Not now, sir, I'm afraid. You're coming to the police station.”

- 26) A: shall get  
B: shall arrive

- 31) A: had rather  
B: would rather  
C: had better  
D: would better

- 32) A: mind to show  
B: mind showing  
C: matter to show  
D: matter showing

- 33) A: didn't need to be  
B: may not have been  
C: couldn't have been  
D: needn't have been

**Choose the correct answer. Only one answer is correct.**

- 34) He ..... The letter carefully before putting it in the envelop.

- A. folded  
B. bent  
C. turned  
D. curved

35) I ..... you to go to the Town Hall and ask them for information about it.

- A. advertise
- B. announce
- C. notice
- D. advise

36) He wasn't admitted to the club because he wasn't a .....

- A. partner
- B. member
- C. social
- D. representative

37) You must..... facts and not run away from the truth.

- A. look
- B. sight
- C. front
- D. face

38) I ..... to him for the error.

- A. excused
- B. apologized
- C. pardoned
- D. forgave

39) She's bought some lovely .....to make herself a dress.

- A. material
- B. clothing
- C. costume
- D. pattern

40) He's staying in the youth ..... in Market Street.

- A. home

- B. lodge
- C. hostel
- D. house

41) It's no use ringing me at the office this week because I'm .....

- A. by my leave
- B. at leave
- C. in holidays
- D. on holidays

42) ..... at the Town Hall, the queen was welcomed by the Mayor.

- A. On reaching
- B. at arrival
- C. On arrival
- D. At reaching

43) He ..... working till he was seventy years old.

- A. kept on
- B. kept
- C. followed
- D. succeeded

44) The meeting ..... at midnight and we all went home.

- A. broke through
- B. stopped off
- C. stopped up
- D. broke up

45) He's not as honest as he.....

- A. makes up
- B. makes out
- C. gives over
- D. gives away

## Appendix C

### Reading Strategy Use Questionnaire in Persian

۳. قبل از خواندن هر متن ابتدا نگاهی گذارا و اجمالی به آن می‌اندازم تا بفهمم به صورت کلی در چه موردی است.
۴. در مورد اینکه آیا محتوای متن متناسب با هدف من از

۱. در زمان خواندن هر متن هدفی را در ذهن خود مشخص می‌کنم.
۲. برای خواندن و فهم هر متن ابتدا در مورد هر آنچه که می‌دانم فکر می‌کنم.

- خواندن آن متن است فکر می‌کنم.
۲۲. یکبار سوالاتی را که انتظار دارم جواب آنها را در متن پیدا کنم، از خودم می‌پرسم.
۲۳. برای اطمینان از فهم مطالب، آرام و با دقت به خواندن متن می‌پردازم.
۲۴. در زمان از دست دادن تمرکز، کمی به خودم استراحت می‌دهم.
۲۵. سرعت خواندن خود را مطابق با آنچه که می‌خوانم تنظیم می‌کنم.
۲۶. در زمان دشوار شدن متن دقت بیشتری به مطالب می‌کنم.
۲۷. گهگاهی خواندن را متوقف کرده، و به آنچه خوانده‌ام فکر می‌کنم.
۲۸. برای به‌خاطر سپردن مطالب خوانده‌شده، سعی در به تصویر درآوردن و تجسم اطلاعات دارم.
۲۹. هنگام دشوار شدن متن، مطلب را دوباره مطالعه می‌کنم.
۳۰. سعی در حدس زدن معانی کلمات و عبارات دشوار دارم.
۵. با توجه کردن به خصوصیات همچون طول متن و نحوه سازماندهی آن مختصراً نگاهی به آن می‌اندازم.
۶. دقیقاً مشخص می‌کنم که کدام قسمت از متن را با دقت و کدام قسمت را به‌صورت گذرا مطالعه نمایم.
۷. از جداول، تصاویر و اعداد و ارقام داخل متن برای فهم بیشتر آن بهره می‌گیرم.
۸. از هر نشانه‌ای در متن که مرا در فهم بهتر آن یاری دهد استفاده می‌کنم.
۹. از نشانه‌های تاییبی از قبیل کلمات بولد و ایتالیک برای شناسایی نکات کلیدی استفاده می‌کنم.
۱۰. با دقت اطلاعات ارائه‌شده در متن را تجزیه و تحلیل و ارزیابی می‌کنم.
۱۱. در مواجهه با مطالب به‌ظاهر متناقض از فهم خود از مطالب اطمینان حاصل می‌کنم.
۱۲. سعی می‌کنم تا در مورد زمینه و موضوع متن حدس بزنم.
۱۳. در مورد صحت و عدم صحت حدس‌های زده‌شده اطمینان حاصل می‌کنم.
۱۴. در زمان خواندن متن یادداشت‌برداری می‌کنم.
۱۵. هر وقت احساس کردم که متن دشوار شده، بلندبلند می‌خوانم تا به فهم آنچه خوانده‌ام کمک کند.
۱۶. جهت تفکر مجدد بر روی اطلاعات مهم، مطالب خوانده شده را به‌صورت خلاصه‌نویسی شده درمی‌آورم.
۱۷. جهت ارزیابی فهم خود، مطالب خوانده شده را با دیگران به بحث می‌گذارم.
۱۸. برای به‌خاطر سپردن مطالب مهم زیر آنها را خط می‌کشم.
۱۹. از کتب مرجع از قبیل فرهنگ‌لغت‌ها برای کمک به فهم بیشتر متن استفاده می‌کنم.
۲۰. برای فهم بیشتر هر مطلب، یکبار آن را آن‌طوری که فهمیده‌ام بازتولید می‌کنم.
۲۱. در طول روند خواندن متن، جهت برقراری ارتباط میان مفاهیم، گاهی به مطالب قبلی و گاهی نیز به مطالب بعدی مراجعه می‌کنم.