

Resilience and Reflectivity as Predictors of L2 Reading Comprehension: A Case of Iranian EFL Learners

Ali Malmir *

Department of English Language, Imam Khomeini International University, Iran

Nasrin Vosooghi
Independent Scholar, Iran

Received on: 16-5-2021

Accepted on: 25-11-2021

Abstract

Reflectivity and resilience have been introduced in SLA research as two substantially effective variables, influencing the teaching and learning of an L2 in some EFL/ESL contexts. Accordingly, this study was conducted to examine the relationship among reflectivity, resilience, and reading comprehension performance of Iranian EFL learners. The study sample included 70 intermediate EFL learners studying English at a Language Institute in Tehran. The administration of the Preliminary English Test (PET) allowed the researchers to homogenize the participants concerning their general L2 proficiency. During the data collection procedure, the participants answered the Eysenck Impulsiveness Questionnaire (EIQ), which categorized them into two subgroups of impulsive and reflective learners. Then, the learners were given Connor Davidson's (2003) Resilience Scale, and finally, the reading section of another PET Test was used to test the participants' reading comprehension performance. Results of data analysis using regression analyses showed that there was a statistically significant relationship between resilience and reading comprehension and between reflectivity and reading comprehension. Furthermore, the regression analyses revealed that both resilience and reflectivity could strongly predict the reading comprehension performance of the EFL learners; however, it was found that resilience was a better predictor of reading comprehension compared to reflectivity. The results of this study have some pedagogical implications that would help EFL teachers, learners, and syllable designers to better deal with teaching and learning English as a foreign language.

Keywords: EFL Learner, Reading Comprehension, Reflectivity, Resilience.

1. Introduction

Reading comprehension has been investigated more than other language skills in nearly all the EFL/ESL contexts; however, the inefficiency of learners' reading comprehension is still an interminable one for many language learners. It is evident that L2 learners need to comprehend the target language content and other L2 materials through reading skills. This ubiquitous need for reading comprehension skills is a necessity for L2 learners with any proficiency level. That is, EFL students need a greater "amount of comprehensible input, and reading materials are usually the most accessible source" (Afflerbach,

© 2023 JJMLL Publishers/Yarmouk University. All Rights Reserved.

* Doi: <https://doi.org/10.47012/jjml.15.2.3>

* Corresponding Author: malmir@hum.ikiu.ac.ir

Pearson, and Paris, 2008: 367). Recent investigation on reading has revealed that reading is a multifaceted cognitive action that is crucial for acceptable functioning and for gaining information in present-day society (Shang 2010).

Nearly in all EFL contexts, reading skill is more significant and obligatory in comparison with other language skills and accordingly, it has been the target of more empirical and theoretical thoughts and investigations. This paramount importance for reading comprehension comes from both EFL teachers and learners (Richards and Renandya 2002). Such centrality and importance are based on the reality that reading comprehension is the best avenue for getting information in L2 classes about the content and form of the language being acquired. Singhal (2001) pointed out that nowadays many researchers, instructors, and instructor trainers of foreign languages attempted to become aware of the techniques involved in the reading skill, and have proven that inexperienced persons use a variety of techniques to help them with the attainment, retention, and retrieval of the previously stored information.

Chamot (2005) characterizes reading expertise as an ability that includes the actuation of pertinent information and dialect aptitudes to induce data over from one person to another. Chastain (1988: 216) also commented that "reading is the activation of relevant knowledge and related language skills to accomplish an exchange of information from one person to another". Despite the integral role of reading comprehension skills, it has not been paid the required attention in the Iranian EFL curriculum and its relationship with learners' cognitive styles such as their degree of impulsivity and reflectivity which may play a salient part in this regard. Besides, successful reading comprehension is dependent on the factors such as resilience as a truly important affective factor; an issue that has been comparatively less studied in the Iranian EFL context. Accordingly, the present empirical study was an effort to explore the role of resilience in EFL learners' reading comprehension with a reflectivity cognitive style which is important for successful reading comprehension.

2. Literature Review

2.1 L2 Reading Comprehension

Reading comprehension is the most frequently used language skill in second or foreign language learning and its later usage for real-world purposes based on some SLA experts and scholars (e.g. Brown and Lee 2015; Grabe and Stoller 2011; Harmer 2015). Reading comprehension has been defined as the L2 learners' decoding of the written passages to understand the meanings and then to recreate the deciphered meanings in collaboration with the previously developed background and world knowledge in the mind (Grabe and Stoller 2011). This definition has amalgamated the two previously suggested theories of the nature of L2 reading comprehension i.e. top-down processing and bottom-up processing in a more comprehensive interactive model. According to the interactive approach towards reading comprehension, top-down processing and bottom processing interact hand-in-hand during the whole process of reading and understanding the passage (Harmer 2015). Readers first decode the meanings of the words, phrases, clauses, and sentences and then instantly recreate the meanings based on the schemata they have developed in their minds. Grabe and Stoller (2014) mentioned that this two-dimensional and cyclical process continues until

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

the whole meaning of the passage is recreated in the mind of the reader which can be slightly different from one individual reader to the other. Schemata, the building block of the Schemata Theory, are those packages of cognitive and propositional knowledge that are created for the specific concepts or schemes in the mind of the reader during his/her life and learning experiences (Brwon and Lee 2015).

There are other advanced theories about the nature of L2 reading comprehension; nonetheless, all of them include the three aforementioned processes. For example, the Construction-Integration Model talks about the prediction of new knowledge via top-down processing prior to any viewing of the written passage (Geil, 2014). By predicting, it is meant educated and calculated guesses about what may be the content of the passage or the meanings encountered. This first stage is followed by the inferencing stage akin to the bottom-up processing that helps the reader make the meaning from the context (Hedge, 2000). These two phases are called construction phases and are completed by an integration phase where the predicted meanings are compared with the main inferences and the most rational and acceptable ones are accepted to anchor the later predictions and inferences.

Lightbown and Spada (2013) held that inferencing is based on contextual clues and linguistic input which requires L2 learners' capabilities and is more sophisticated than the predicting process. Moreover, predicting can happen in the form of chunks of meanings, phrases or sentences or even a single word. Therefore, predicting itself is a premise for insightful inferences that later are tested and retested during the whole reading procedure. Background knowledge is required in completing this movement from predicting to influencing and then integrating the two for more accurate predictions. Besides, synthesizing abilities of the learner play a pivotal role. The constant integration of the predicted, implied, and confirmed meanings further activates the more related schemata and deactivates the less related ones (Grabe and Stoller 2014). Accordingly, while some meanings are constructed during the reading process some other far meanings are deconstructed and abandoned.

Proponents of this approach classified the inferences in a dichotomy of automatic versus control inferences. The automatic inferences are those that are triggered subconsciously by the mind through top-down processing; however, the controlled ones are those inferences that are under the control of the linguistic stimuli in the written text. Moreover, inferences can be classified into retrieved all generated, with retrieved once being recalled from memory and the previous cognitive structure and the latter being generated from the knowledge given in the text Hedge, 2000). To make this theoretical model even more complex, researchers proffered that all these processes happen within the brain through some psycholinguistic processes that are materialized in the form of multiple connections between neurons and the chemical processes that occur among them in fractions of seconds as supported by the connectionist theory of language development (Brown and Lee 2015; Elwér 2014).

Aside from the schemata-based theories and approaches, success in L2 reading comprehension relies upon many other cognitive, physiological, psycholinguistic, and socio-cultural factors. Grabe and Stoller (2014) argued for the role of the macro context of the culture that involves pragmatic knowledge to interpret the extracted meanings from the reading passage. To provide a clearer picture, we should add that the features of the reading passage itself encompass the grapho-phonetic and physical properties of the text.

Accordingly, Nassaji (2002) pointed out, L2 reading comprehension should be conceived of as a multidimensional process in readers' minds that is based upon the interaction among a myriad of processes of various natures. Nassaji (2002) also mentioned that considering that the brain of the L2 reader is a machine that can successfully decode the written input and interpret it using its information storage is a fallacy because the complexities of reading comprehension are directly dependent on who is the reader and how are his/her cognitive capabilities, psychological tendencies, motivation for reading, and so forth. Some of the most important predictors of L2 reading based on empirical studies are outlined in the next section.

2.2 Empirical Studies on Predictors of L2 Reading

The issue of cognitive, linguistic, sociocultural, and psycholinguistic predictors of L2 reading comprehension has been the target of some empirical studies the most important of which are briefly reported and analysed here. Elwér (2014) mentioned linguistic competencies including phonological awareness (PA), adequate L2 vocabulary, advanced grammar, working and verbal memory, rapid automatized naming (RAN), and decoding capabilities as the most salient predictors of L2 reading comprehension in the existing empirical literature on the issue. After reporting the results of her own study as aforementioned, Elwér (2014) has named other predictors of L2 reading comprehension accuracy and fluency such as the quality of instruction, print-related issues, motivation and psychological preparedness as some other causative factors that need further investigation.

Raudszus, Segers, and Verhoeven' (2021) study reported that decoding abilities and vocabulary knowledge were the two significant predictors of reading comprehension skills in Dutch as an L2. Moreover, they found that L2 skills beyond the sentential level could more significantly contribute to L2 reading comprehension accuracy but not its expansion. Gentaz, Sprenger-Charolles, and Theurel (2015) also argued that poor decoding skills led to poor reading comprehension abilities among L2 learners. Massonnié, Bianco, Lima, and Bressoux (2019) conducted a longitudinal study into the predictors of reading comprehension among 556 French readers, revealing that basic language skills such as vocabulary and syntax knowledge coupled with super-sentential discourse-level abilities could give a boost to participants' reading comprehension over the long term. Moreover, they reported that decoding skills including phonological knowledge and phonemic awareness could also significantly contribute to better reading comprehension capabilities.

Wass, Anmyr, Lyxell, Östlund, Karltorp, and Löfkvist (2019) investigated the contribution of decoding, receptive vocabulary, phonological skills, and working memory to the L2 reading comprehension among young L2 learners, revealing that receptive vocabulary is the most significant predictor followed by decoding abilities. Wass et al. (2019), of course, mentioned that these two predictors can interact with other educational, instructional, and cognitive variables such as age, teachers' involvement, and the role that parents and siblings of the young participants play in developing good reading comprehension habits among young L2 learners. Friesen and Bailey (2021) scrutinised the predictive power of reading strategies and language proficiency for explaining successful reading comprehension in English-French bilingual adults and reported that making inferences and finding the most difficult main ideas could predict better accuracy in reading comprehension, particularly in the dominant language of the bilingual adults. This study also

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

unequivocally supported the positive role of proficiency in the use of various types of reading comprehension strategies that in turn could enhance L2 reading accuracy.

Memisevic, Dedic, Biscevic, Hadzic, Pasalic, and Malec (2020) disclosed that phoneme removal and rapid automatized naming (RAN) were the most weighty predictors of reading comprehension speed; whereas, working memory and processing speed were the two most significant contributors to reading comprehension accuracy. Moreover, Memisevic et al.'s (2020) study demonstrated that the aforementioned variables could also explain some part of the discrepancies in the participants' reading comprehension accuracy and speed. Other empirical studies have also mentioned phonological awareness and working memory as two influential factors in promoting L2 reading comprehension skills (e.g. Mervis, de Magalhães, and Cardoso-Martins 2021; Nation and Snowling 2004).

Having studied and compared the linguistic system sensitivity among 17 languages, Verhoeven and Perfetti (2021) mentioned that the lexical and semantic sensitivity at the surface and deep level of the language plays a significant role in L2 literacy skills including writing and reading comprehension abilities. Quinn's (2016) meta-analysis of 155 empirical studies about L2 reading comprehension revealed that linguistic abilities encompassing grammar and vocabulary knowledge, working memory capacity, and decoding abilities were more significant than other predictors for explaining L2 readers' reading comprehension abilities, particularly for the younger learners. The contribution of L2 lexical knowledge to L2 reading comprehension capabilities has also been vindicated by some other researchers from various L2 contexts (e.g. Cain and Oakhill 2014; Derakhshan and Malmir 2017; Murphy and Justice 2019; Perfetti 2007; Perfetti and Stafura 2014; Verhoeven, van Leeuwe and Vermeer 2011).

Another important branch of empirical studies about the predictors of L2 reading comprehension is related to cognitive styles. Generally speaking, the picture is somehow vague with regard to the contributions of various kinds of cognitive styles to L2 reading comprehension skills (see Brown 2007; Ellis 2003). Reflectivity and resilience are two cognitive styles that may influence L2 reading comprehension skills. These two cognitive styles and their relation to L2 reading comprehension will be outlined and analysed using the existing literature to provide a rationale for their inclusion in the current study.

2.3 Impulsivity/Reflectivity (R/I) and L2 Reading

The reflectivity/impulsivity dimension is interconnected with the degree to which individuals reflect on the correctness of their replies or the speed of replying to the target questions (Fontana 1995). As pointed out by Doron (1993), this dichotomous cognitive style exerts an influence over second or foreign language learning because L2 learners' tendency to answer quickly to language problems or input or to postpone the answer and judgement to its careful reconsideration, directly and indirectly, influences the chain of input, intake, and absorption. According to Brown (2007), an impulsive language learner relies on the intuitive answers to the linguistic input which has some advantages and some disadvantages for L2 development. Reflective language learners may notice the desired linguistic input but they postpone their reaction until they have contemplated the meanings and concepts (Jamieson 1992). In the same vein, reflectivity can also

be a merit and a demerit at the same time for particular language skills and subskills (Razmjoo and Mirzaei 2009; Rezaei, Boroghani and Rahimi 2013).

Concerning the association between reflectivity cognitive style and L2 reading comprehension skills, some experts and SLA scholars have argued that those L2 learners who are more conceptually reflective comprehend the passages with fewer errors and misunderstandings in comparison with their impulsive counterparts (e.g. Brown 2007; Messer 1992; Pirouznia 1994). Nonetheless, impulsive language learners will become faster readers and they can develop better meaning and word-guessing abilities because they dare to embark upon responding quickly to linguistic input. Brown and Lee (2015) held that better deep comprehension versus faster general comprehension capabilities, therefore, can be attributed to this cognitive style of impulsivity versus reflectivity. Messer (1992) argued that although in the earlier stages of L2 reading development reflectivity can mostly bring about more comprehension abilities, however, in the long term and with more practice, impulsivity may overcome its deficiencies and promote deeper comprehension abilities.

Jamieson's study (1992) reported more accuracy in reading comprehension for reflective L2 learners and more fluency for impulsive peers at the upper-intermediate proficiency level. Talebi's (2012) study showed no significant difference between the proofreading abilities of reflective and impulsive L2 readers. Pirouznia's study (1994) provided evidence for the positive relationship between reflectivity and performance on the L2 cloze test as a holistic measure of reading comprehension capability. Singhal (2001) pointed out that L2 reflective readers could develop better inductive reasoning abilities in comparison with impulsive peers. Of course, no differences have been put forward for deducting reasoning abilities or other reading comprehension skills, clearly indicating a gap in the existing literature that set the stage for the present investigation.

Having reviewed some of the empirical studies regarding the relationship between L2 reading comprehension and the reflectivity/impulsivity cognitive style, Brown (2007) has called for more empirical studies from various L2 contexts. According to Brown (2007), there were fewer studies that have investigated the relationship between R/I cognitive style and L2 reading comprehension which are also limited to those studies carried out in the UK and the US, necessitating further research in other L2 contexts.

2.4 Resilience and L2 Reading

Resilience in educational psychology has been delineated as the capability for efficacious adaptation despite the adverse circumstances or stressful events brought on by personal traits, conditions, or experiences (Luther and Cicchetti 2000; Masten 2001; Waller 2001; Werner 1995). Similar to this definition, resilience in the SLA literature has been depicted as L2 learners' steadfastness, adaptability, and resuscitation capability during their language learning processes specifically when learners encounter some cognitive, metacognitive, affective, and sociocultural difficulties due to the cumbersome task of learning a foreign language (Brown 2007; Sheikholeslami 2009). Resilience or positive adaptation has been proposed to be very important in L2 development specifically in study-abroad situations (Momeni and Karimi 2010).

From the theoretical aspect, some SLA scholars have strongly advocated a positive and facilitative role for resilience in improving L2 reading comprehension skills albeit most of them still lie in the theory

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

domain and few empirical studies have vindicated these claims (e.g. Harnish 2005; Kirby and Fraser 1997; Levitt, Gaucci-Franco and Levitt 1993; Luther and Cicchetti 2000; Masten 2001; Shirazi 2010). Brown (2007), for example, mentioned that higher resilience in learning L2 implies more opportunities for input that are received mostly through reading and to a lower degree through listening. More reading practice has been mentioned as the best cause of promoting L2 reading comprehension skills in the existing literature (e.g. Ellis 2003; Geil, 2014; Grabe and Stoller 2011). Brooks (2006) linked resilience with problem-solving abilities that are salient in L2 reading comprehension development. According to Brown (2007), resilience in reading also triggers more feedback-seeking opportunities on behalf of the learners from other learners and teachers which can pave the way for nourishing better reading comprehension skills. The impact of receiving corrective feedback on bolstering reading comprehension skills is well empirically supported in the available literature about this issue (Brooks 2006; Brown 2007; Hedge 2000; Lightbown and Spada 2013; Perfetti 2007).

Of course, it should be noted that although the degree of resilience for L2 learning as a cognitive style may be relatively stable, it is changing based on contextual and internal learner dynamics (Waller 2001). Factors such as reading text, the reader's motivation for reading, the teacher and other readers' characteristics (peers) can increase or decrease an L2 learner's resilience (Mousavi and Askari 2010). Some scholars have also claimed that resilience affects L2 reader's motivation for reading (Brown and Lee 2015), ambiguity tolerance during reading particularly when facing difficult words and concepts (Connor and Davidson 2003), autonomous self-reading (Brown 2007), as well as critical thinking abilities (Shang 2010). As aforementioned for the relationship between reflectivity/impulsivity cognitive style and L2 reading comprehension abilities, there is also an inadequacy for the empirical research on the relationship between L2 resilience and reading comprehension skills. Most of the positive effects of the role of resilience are scholarly claims and best hunters about the idiosyncratic helpful characteristics of resilient language learners. The research gaps necessitate launching empirical studies, in particular, in EFL contexts.

2.5 The Current Study

Because of the importance of reading comprehension and skill in higher education for most EFL learners in Iran as the most significant channel for getting language and other types of inputs (Amiri and Maftoon 2010), and also the confluence of some learner variables on learners' reading comprehension ability and their performance on reading comprehension tests, in this research two variables of reflectivity and resilience were considered in case of being possibly related to EFL learners' performance in their reading comprehension, and also in case of being predictive factors on L2 reading comprehension. Although a fair deal of research has supported the positive relationship between the resilience and reflectivity/impulsivity variables on one hand and L2 reading comprehension skills on the other hand, unfortunately, as aforementioned most of these proffered positive effects in L2 reading comprehension improvement are only scholarly statements and claims and comparatively less empirical research is available to support them. Accordingly, because of the importance of reading comprehension skills for Iranian EFL learners and their deficiencies in these skills and because of the inadequacy of the empirical

studies about the relationship between resilience, reflectivity/impulsivity, and L2 reading comprehension, the current correlation of the study was launched. In addition to filling the gap in the current theoretical literature on L2 reading comprehension, the current study can help Iranian EFL learners improve their reading comprehension skills

Questions of the Study:

Specifically, the current study sought to answer the following research questions:

1. Is there any relationship between Iranian intermediate EFL learners' reflectivity and their L2 reading comprehension?
2. Is there any relationship between Iranian intermediate EFL learners' resilience and their L2 reading comprehension?
3. Which predictor (resilience or reflectivity) has more effect than the other on the EFL participants' reading comprehension skills?

3. Method

3.1 Participants

A sample of 70 EFL learners from a private Language Institute in Tehran enrolled in this study. These participants were selected from 120 learners based on their scores on a preliminary English test (PET). Those learners whose scores on the PET were ± 1 SD above or below the mean were chosen for the current study. The participants were adult EFL learners with an age range of 18-35. They were 55 females and 15 males and their educational degrees and study major varied.

3.2 Instruments

To conduct the current study, these instruments were employed: The Preliminary English Test (PET), the 25-item questionnaire developed by Connor and Davidson (2003), Eysenck and Eysenck's (1990) Impulsiveness Questionnaire (EIQ), and the Reading Section of the PET.

3.2.1 The Preliminary English Test (PET) as a Homogeneity Test

The Preliminary English Test (PET) was given to the participants at the outset of the study to make them homogeneous concerning their general English language proficiency. The test targets intermediate-level learners and includes everyday written and spoken communications and covers the four main language skills. The reading section has five parts with 35 items while the writing section consists of three parts and 7 items. The test takers are required to comprehend authentic texts and to know the words and grammar of these texts properly in 90 minutes. The listening section includes 30 items about real-world discussions and interactions and should be answered in 30 minutes. Finally, the speaking section comprises four sections entailing active participation in conversations and the exchange of meanings in 10 minutes. As mentioned by the majority of SLA researchers (e.g. Ellis 2003; Mackey and Gass 2015), L2 learners' proficiency is an intervening variable that should be controlled since it affects the internal validity of the research. Among many proficiency tests, the authorities of the language institute where this study was conducted, only

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

permitted the administration of this test which is a study limitation. The institute authorities mentioned that using Cronbach's alpha reliability indices in previous administrations of this mock PET test (accepted placement test of the institute) were always beyond .79, clearly indicating the high reliability of this test.

3.2.2 Resilience Scale (Connor & Davidson, 2003)

Connor and Davidson's (2003) Resilience Scale was employed to examine learners' stress-coping ability. This 5-point scale contains 25 items with higher scores showing greater resilience. It is composed of items representing various facets of resilience comprising a sense of personal competency, forbearance for negative affection, the positive reception of adjustment, reliance on one's intuitions, a feeling of social sustenance, spirituality, and an active perspective to problem-solving. High reliability and validity of the scale have been reported by the test developers in several administrations (Connor and Davidson 2003). The questionnaire was translated into Persian and was validated and adapted to Iranian culture by Jokar, Samani, and Sahragard (2007) who reported that the reliability of the Persian translation of the scale was .73.

3.2.3 Eysenck's Impulsiveness Questionnaire

Eysenck and Eysenck's (1990) Impulsiveness Questionnaire (EIQ) encompasses 54 items and evaluates impulsiveness (19 items), venturesomeness (16 items), and empathy (19 items). A Persian sub-scale of the questionnaire comprising 19 five-point Likert scale items was used in this study. The scale as a whole and its different parts enjoy high reliability and validity based on previous applications. The scope of impulsiveness scores oscillates between 19 to 95. Based on the test rubrics, the candidates who get scores from 60 to 95 are considered impulsive, and those who get scores from 19 to 40 are respectively considered reflective individuals. It should be stated that scores from 41 to 59, which demonstrate medium impulsivity, were excluded from this study. The allocated time for responding to the questions of this questionnaire was 10 minutes. A Persian form of this questionnaire was prepared and validated by Salimi (2001). The reliability of the Persian impulsive sub-scale was found to be .86. The Persian version of the impulsivity sub-scale serves the impulsivity sub-scale of the present study.

3.2.4 Reading Section of the PET

The reading section of another PET (a different version of the one used as a homogeneity test) was used in this study to test participants' reading comprehension. This section consists of five passages and 35 items and normally can be completed in 45 minutes and each correct answer has one mark. This reading test assessed the participants' reading comprehension skills including making inferences, finding the main ideas, scanning for detailed information, skimming for the general attitude of the writer, and locating the antecedents of some words. Because it was only one module of a PET test and was considered a mocked sub-test, its reliability was checked ($r=.85$) in a pilot study with a group ($n=29$) comparable to the one that participated in the current study in the same language institute.

3.3 Procedure

To gather the needed data, the following phases were implemented. First, the homogeneity test, i.e., the PET was completed by 120 EFL learners. Later, 70 learners whose scores were with the ± 1 SD from the mean were selected. Then, Resilience Scale (Connor & Davidson, 2003) was administered. The participants were informed that the instruments would be used only to gather information for the purpose of the research, and the obtained information would be kept confidential and had no effect on their final score. Afterwards, the learners filled out Eysenck Impulsiveness Questionnaire. Lastly, students filled out Connor and Davidson's Resilience Scale. To evade any misapprehensions, the translated versions of the two questionnaires were used. After that, a sample PET reading exam was used to test the study participants' reading comprehension.

3.4 Data Analysis

The SPSS program (version 20) was employed for data analyses. Pearson correlation coefficient was utilized to test the null hypothesis of this study and to predict the degree of correlation between the variables. Also, to investigate whether resilience and reflectivity could predict EFL learner's reading comprehension abilities including making inferences, skimming, scanning, and locating main ideas, a regression analysis was applied.

4. Results

A PET as a homogeneity test was given to 120 Iranian EFL learners the results of which is presented in Table 1.

Table 1: Descriptive statistics for learners' scores on PET

	N	Min	Max	Mean	Std. Error	Std. Deviation	Skewness	Kurtosis
PET Scores	120	49	97	74.31	.22	9.54	-.087	.221

The M and SD values were 74.32 and 9.54, respectively. Those 70 learners whose scores were within ± 1 SD around the mean were chosen. Then, the needed preliminary analyses were done to check the availability of the assumptions for applying correlation and regression analyses. The linearity, homoscedasticity, and normality assumptions were checked. To examine the linearity, scatter plots were produced. Based on the focus of the two initial research questions, the researcher created two scatterplots which are presented in Figures 1 and 2.

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

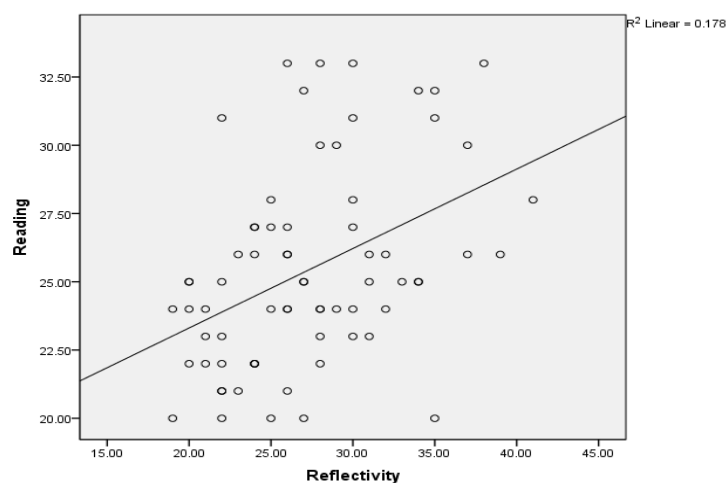


Figure 1: Scatterplot for the relationship between reflectivity and reading

From Figures 1 and 2, it can be established that the relationship between these variables, although not perfectly linear, is not profoundly non-linear. As witnessed, there is not a U-shaped or curvilinear pattern of distribution for the two relationships. Consequently, the linearity of relations was confirmed. Moreover, the two distributions of scores had not a funnel shape; therefore, the supposition of homoscedasticity was verified for these two independent variable scores.

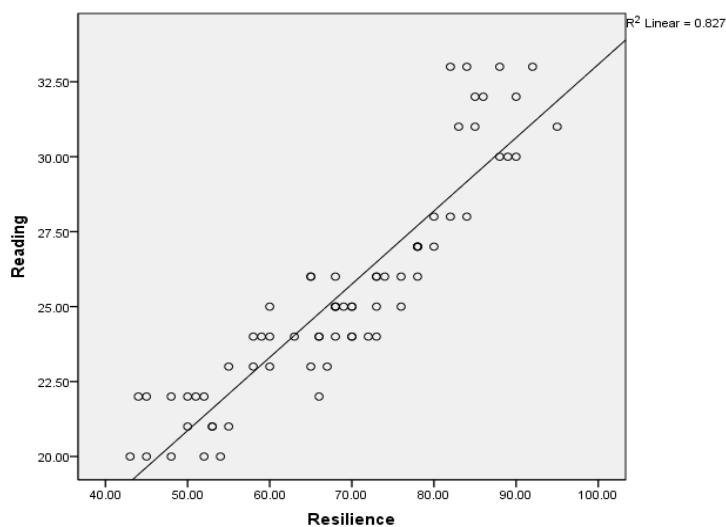


Figure 2: Scatterplot for the relationship between resilience and reading

The descriptive statistics for scores on the three measures, comprising the values of skewness and kurtosis ratios, are depicted below in Table 2.

Table 2: Descriptive statistics of the scores on the three used measures

	N	Mean	SD	Skewness			Kurtosis		
				Statistic	Std. Error	Ratio	Statistic	Std. Error	Ratio
Reading	70	25.42	3.63	.60	.28	.99	-.39	.56	.70
Reflectivity	70	27.85	6.79	.54	.28	.89	-.31	.56	-.54
Resilience	70	68.68	13.52	-.09	.28	-.33	-.89	.56	-.97

As demonstrated in Table 2, the distribution for the scores for each of the variables was normal as all of the skewness ratios fell within the range of ± 1.96 . Also, the shapes of the distribution of the scores were normal. The normal probability plots, i.e., Normal Q-Q Plots, also indicated the normality of related distributions. The application of the Kolmogorov-Smirnov test also supported the normality of the distributions.

As stated earlier, the first target of this study was to analytically investigate the relationship between EFL learners' reflectivity and reading comprehension skill. To achieve this goal, the Pearson product-moment correlation was utilized as reported in Table 3.

Table 3: Pearson product-moment correlations for reflectivity and reading comprehension

		Reflectivity	Reading
Reflectivity	Correlation Coefficient	1.000	.433**
	Sig. (2-tailed)	.	.000
	N	70	70
Reading	Correlation Coefficient	.433**	1.000
	Sig. (2-tailed)	.000	.
	N	70	70

As exhibited in Table 3, there was a significant positive correlation between reflectivity and reading comprehension skill ($r = .433$, $n = 70$, $p < .05$), signifying a large effect size. The second goal of this study was to scientifically explore the relationship between EFL learners' resilience and reading comprehension skill via applying another Pearson product-moment correlation (see Table 4).

Table 4: Pearson product-moment correlations for resilience and reading comprehension

		Resilience	Reading
Resilience	Correlation Coefficient	1.000	.929**
	Sig. (2-tailed)	.	.000
	N	70	70
Reading	Correlation Coefficient	.929**	1.000
	Sig. (2-tailed)	.000	.
	N	70	70

As clarified in Table 4, there was a significant and strong positive correlation between resilience and reading comprehension skills of EFL learners ($r = .929$, $n = 70$, $p < .01$, signifying a very large effect size), and high levels reading comprehension scores were associated with higher resilience. The third question aimed at examining the relationship between learners' reflectivity and resilience and their reading comprehension. Before applying the regression analysis, its main assumptions including multicollinearity, the presence of outliers, normality, linearity, homoscedasticity, and the independence of residuals were

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

meticulously checked. To scrutinize the multicollinearity, the correlations between resilience and reflectivity were provided (Table 5).

Table 5: Correlations for the co-togetherness between the two independent variables

		Reflectivity	Resilience
Pearson Correlation	Reflectivity	1.000	.328**
	Correlation Coefficient		
	Sig. (2-tailed)	.	.006
Resilience	Resilience	.328**	1.000
	Correlation Coefficient		
	Sig. (2-tailed)	.006	.
		N	N
		70	70

The bi-variate correlation between the two independent variables was moderate (.32) and thus, appropriate for the purposes of the present study. The obtained Tolerance value for each independent variable turned out to be .88 which is larger than .10; and the calculated VIF was 1.32 which is well below the 10 sets as the cut-off score (based on Tabachnick and Fidell 2007), specifying that multicollinearity was not disrupted (See Table 6 ahead).

Table 6: Tolerance and VIF values

Model		Collinearity Statistics	
		Tolerance	VIF
1	Reflectivity	.883	1.132
	Resilience	.883	1.132

Normal Probability Plot (P-P) was utilized for checking the normality assumption (Figure 3). Here, it is expected that the points lie in a reasonably straight diagonal line from bottom left to top right.

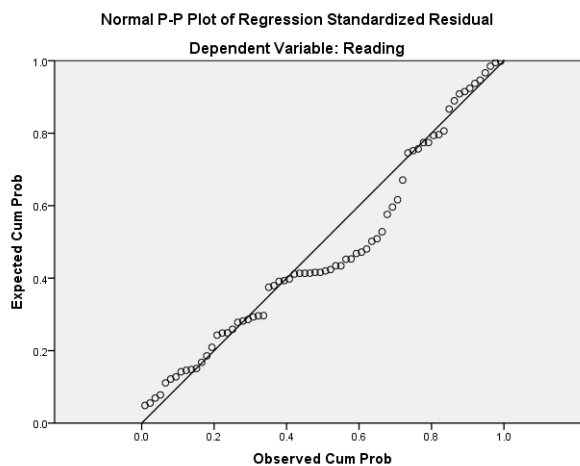


Figure 3: The normal P-P plot of regression standardized residual

The scrutiny of Figure 3 unravels some kind of deviation (though not too much) from normality. Furthermore, the scatterplot of standardized residuals (Figure 4) showed no obvious or regular arrangement in the residuals.

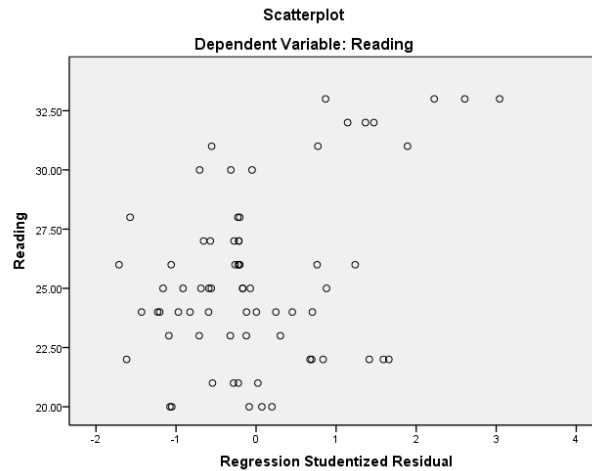


Figure 4: The scatterplot of the standardized residuals

Having juxtaposed these types of analysis, the researcher could logically assume that the assumption of normality was met. The presence of outliers was perceived from the scatter plot of standardized residuals (Figure 4). Tabachnick and Fidell (2007) maintained that outliers are cases with a standardized residual of more than 3.3 or less than -3.3 which are rarely seen in Figure 4. Nonetheless, in large samples, it is accepted to locate several outlying residuals. Besides, the Mahalanobis distance verified the benign nature of these few outliers (Table 7).

Table 7: Residuals statistics for the regression model

	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	.004	8.666	1.971	1.594	70
Cook's Distance	.000	.106	.016	.025	70

Tabachnick and Fidell (2007) pointed out that when we have 2 independent variables, the critical value for the Mahalanobis value is 13.82, implying that if the Mahalanobis value for a variable is bigger than 13.82 that case is an outlier. As illustrated in Table 7, the highest Mahalanobis value is 8.66, which is below the critical level. Consequently, the prerequisite of the outliers was retained. Based on the results of the preliminary analyses reported above, it was then legitimate to run a multiple regression to answer the third research question. Resilience and reflectivity were the predictor variables and reading comprehension was the predicted variable in the constructed model using Enter Method. The summary of the model can be seen in Table 8.

Table 8: Model summary for the relationship between resilience and reflectivity and reading

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.917	.841	.836	1.47135	2.223

As reported in Table 8, R came out to be 0.917 and R^2 was 0.841. This means that the model (including reflectivity and resilience) could explain 84.1 percent of the variance in reading comprehension which is a high percentage. Table 9 reports the results of ANOVA ($F_{(5, 67)} = 176.93, p = 0.0005$), designating that the model could significantly predict EFL learners' reading comprehension.

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

Table 9: ANOVA for the relationship between resilience and reflectivity and reading

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	766.096	2	383.048	176.938	.000
	Residual	145.047	67	2.165		
	Total	911.143	69			

Table 10 exhibits the Standardized Beta Coefficients to determine the predictability power of reflectivity and resilience for L2 reading.

Table 10: Coefficients for the relationship between resilience and reflectivity and reading

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
	(Constant)	7.079	1.123		6.301	.000			
1	Reflectivity	.087	.036	.125	2.418	.018	.422	.283	.118
	Resilience	.233	.014	.866	16.706	.0005	.909	.898	.814

As represented above, resilience has the largest β coefficient ($\beta = 0.866$, $t = 16.706$, $p = 0.0005$), presenting that resilience makes the strongest contribution to explaining L2 reading comprehension. Moreover, reflectivity was ranked as the second predictor of reading comprehension ($\beta = 0.125$, $t = 2.418$, $p = 0.018$). Finally, the inspection of Part correlation (semi partial correlation coefficient) revealed that resilience uniquely explains 66.2 percent of the variance in reading comprehension ($.814 \times .814 = .662$) while reflectivity uniquely explains 1.3 percent of the variance in reading comprehension ($.118 \times .118 = .013$).

5. Discussion

As presented earlier, this study, first, attempted to inspect the relationship between EFL learners' reflectivity and resilience and their reading comprehension skill. The nature of this relationship was further explored by posing three questions that scrutinize this relationship from different perspectives. The results indicated that there was a significant correlation between EFL learners' reflectivity and reading comprehension ($r=.43$) and also between their resilience and reading comprehension ($r=.93$). Resilience was a better predictor of reading comprehension skill ($\beta = 0.866$, $t = 16.706$, $p = 0.0005$) than reflectivity ($\beta = 0.125$, $t = 2.418$, $p = 0.018$); and resilience uniquely explains 66.2 percent of the variance in reading scores.

The results indicated that EFL learners' reflectivity as a cognitive style has significant effects on their reading comprehension skills. Hence, it is cogent to proffer that reflective learners are better EFL readers. This conclusion is consistent with the results of some earlier studies (Doron 1993; Malmir and Mohammadi 2018, Pirouznia 1994; Rezaei, Boroghani, and Rahimi 2013). For example, Pirouznia's study (1994) also provided evidence for the positive relationship between EFL learners' reflectivity and reading comprehension. The result of this study corroborates with those of Doron (1993) who examined the relationship between R/I and EFL reading proficiency and the result suggested that reflective students were slower but more precise than impulsive learners in reading. Also, Kagan's Matching Familiar Figures test was utilized to measure a group of ESL students' R/I. Doron, then, employed comprehension and speed

posttests of the same learners to calculate the correlation between R/I and reading. She noticed that reflective learners were slower and more exact than impulsive learners. The researcher recommended that this point should be taken into account in the teaching of L2 reading. Moreover, the findings of the present research are consistent with those of Brown's (2007) study that revealed the important role of learners' preferences and tendencies in learning a foreign or second language for instance those learners who are more reflective can embark upon doing some special learning activities better than their counterparts who are impulsive.

Furthermore, the result of the current study supports the result of the study which has been done by Rezaei et al. (2013) who made an attempt to survey the prominence of reflective/impulsive cognitive style for the efficacy of awareness-raising activities. They stated that learners with these cognitive styles respond variously to awareness-giving activities. They proposed that this characteristic should be considered very substantial and decisive for EFL learners.

Nonetheless, the results of this study are not totally confirmed by other investigations that discovered reflectivity tendencies did not have a tremendously effective impact on various language skills. Talebi's study (2012), for instance, showed that reflectivity/impulsivity did not have a significant effect on the utilization of formulaic sequences in writing news summaries among EFL learners. Another contradictory study was carried out by Riazi and Riasati (2007) that revealed no significant dissimilarity between low, medium, and high impulsive learners and their scores in various types of reading questions encompassing display, referential, and inferential questions. Another divergent investigation has been reported by Razmjoo and Mirzaei (2009), suggesting an insignificant relationship between EFL learners' reflectivity/impulsivity and their English language proficiency.

The findings of the current research corroborate with the outcomes of studies carried out by Levitt, Gaucci-Franco and Levitt (1993), Harnish (2005), Mousavi and Askari (2010), Sheikholeslami (2009), and Shirazi (2010). As mentioned by Levitt et al. (1993), the degree of resilience is representative of learners' capacity to accept their educational failures and aptly cope with academic pressures and entanglements. According to Waller (2001), resilience exerts a significant influence on the process of academic accomplishment in learning foreign languages or other domains.

According to the existing literature, the intellectual and cognitive abilities of language learners involving their planning capability, moral judgment, problem-solving expertise, and intrapersonal reflective abilities are among the most crucial features of successful language learners (e.g. Melendez and Tomlinson-Clarke 2004; Brooks 2006). Accentuating the connection between problem-solving skills and a resilient mentality, Brooks (2006: 228) states that whenever young learners can "articulate problems, reflect on and engage in possible solutions, and consider other options if the initial solutions don't pan out, they demonstrate a resilient mindset. These skills foster a sense of ownership for and control of their own lives".

Sheikholeslami's (2009) study showed that there is a positive relationship between learners' degree of resilience and their self-esteem for learning in general and language learning in particular. In a similar study, Harnish (2005) reported that enhancing learners' resilience can promote their educational success.

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

Mousavi and Askari (2010) also found a significant relationship between both resilience and language achievement.

The findings of the present study, however, showed that resilience can predict 66.2 percent of the variance of reading comprehension while reflectivity can predict 1.3 percent of the variance of reading comprehension. Perhaps the reason behind these results can be explored among the theoretical concepts of these two variables as well as the attention which was paid more to resilience than reflectivity.

6. Conclusion and Implications

This study had two main conclusions. First, both reflectivity and resilience had significant relationships with reading comprehension skills. Put in another way, the learners' reflectivity and their resilience level had a significant contribution to the predictability of the reading comprehension skills (comprising skimming for general attitudes, scanning for detailed information, finding the main ideas, and making inferences) among EFL learners. Second, it was revealed that resilience had a higher significant relationship with reading comprehension skills than that of reflectivity. The obtained results of the present study may have several implications for second language teachers and learners. Teachers, for instance, should gain more awareness that one size does not fit all and various learners can gain language improvement in general and reading skills in particular in various ways based on their cognitive styles and learning tendencies. Hence, learners' cognitive incarnations and affective factors lead them to deeper insights into the difficulties and obstacles that EFL learners face during the reading process and to solve them accordingly. The findings of the present study also can assist teachers to set realistic expectations for their students' reading comprehension abilities. Teachers can encourage students to reflect and contemplate more deeply on their reading processes and how they can be resilient to learn and solve their problems based on such reflections. In other words, it is incumbent on the teachers to give a boost to their students' use of effective reading strategies that hinge on reflective practices and critical thinking orientations.

Findings are also pedagogically constructive for the EFL learners themselves in that they may not be cognizant of their own cognitive science and reading comprehension strategies. Dissecting the inclinations of reflectives and their reading strategies may aid students to augment their resilience and reading strategies. Furthermore, EFL students can also partly modify their reading styles, for example, impulsive learners can get information about reflective learners' reading comprehension capabilities and strategies which in turn can promote the accuracy and speed of their reading comprehension.

The current study had some limitations. The sample of the study was limited to 70 intermediate EFL learners. The researchers could not recruit a larger sample including other proficiency levels due to the regulations of the language institute where the study was carried out. Moreover, among various proficiency tests, the institute authorities only permitted the administration of the PET test which was their accepted placement test. Moreover, the reading test was also selected from another PET test. Choosing a larger sample including various proficiency levels and using other proficiency and reading comprehension tests can yield more insightful results in future studies by other researchers in various EFL contexts. Another limitation of the current study was that it only focused on some reading comprehension abilities that are

required during silent reading specifically during reading comprehension tests. The relationship between resilience and reflectivity on the one hand and other types of reading skills including oral reading, silent reading, speed reading, and accurate and fluent reading can be investigated through methodologically robust studies by other studies.

المرونة والتأمل كمتنبئين عن القراءة والفهم في اللغة الثانية: حالة متعلمي اللغة الإنجليزية لغة أجنبية في إيران

علي مالمير

قسم اللغة الإنجليزية، جامعة الإمام الخميني العالمية، إيران

نسرین فوسوجي

باحث مستقل، إيران

الملخص

لقد أُدخِلَ التأمل والمرونة في أبحاث اكتساب اللغة الثانية SLA متغيرين فعالين إلى حد كبير، مما يؤثر في تعليم اللغة الثانية L2 وتعلمها في بعض سياقات اللغة الإنجليزية لغة أجنبية EFL واللغة الإنجليزية لغة ثانية EFL. وبناءً على ذلك، أُجريت هذه الدراسة لفحص العلاقة بين الأداء التأملي والمرونة والقراءة للفهم لمتعلمي اللغة الإنجليزية لغة أجنبية. تضمنت عينة الدراسة 70 متعلماً من متعلمي اللغة الإنجليزية لغة أجنبية في المستوى المتوسط يدرسون اللغة الإنجليزية في معهد اللغات في طهران. سمحت إدارة اختبار اللغة الإنجليزية التمهيدي (PET) للباحث بأن يجانس المشاركين فيما يتعلق بالكفاءة العامة للغة الثانية L2. أثناء إجراء جمع البيانات وأجاب المشاركون على استبيان الاندفاع إيسنك (EIQ)، الذي صنفهم إلى مجموعتين فرعيتين من المتعلمين الاندفاعيين والتأمليين. وبعد ذلك، أُعطيَ المتعلمون مقياس مرونة كونور ديفيدسون (2003)، وأخيراً، استُخدم قسم القراءة في اختبار PET آخر لاختبار أداء المشاركين في القراءة للفهم. وقد أظهرت نتائج تحليل البيانات باستخدام تحليلات الانحدار (Regression Analyses) وجود علاقة ذات دلالة إحصائية بين المرونة والقراءة للفهم وبين التأمل والقراءة للفهم. علاوة على ذلك، كشفت تحليلات الانحدار أن كلا من المرونة والتأمل بإمكانهما أن يتنبأان بقوة عن أداء القراءة والفهم لمتعلمي اللغة الإنجليزية لغة أجنبية. ومع ذلك، فقد وُجِدَ أن المرونة كانت مؤشراً أفضل للقراءة والفهم مقارنة مع التأملية. وتسهم نتائج هذه الدراسة في بعض الشؤون التربوية التي بإمكانها مساعدة مدرسي اللغة الإنجليزية لغة أجنبية، كما أنه بإمكانها أن تساهم في إعداد المتعلمين ومصممي المناهج التدريسية للتعامل بشكل أفضل مع تعليم وتعلم اللغة الإنجليزية لغة أجنبية.

الكلمات المفتاحية: متعلم اللغة الإنجليزية لغة أجنبية، القراءة للفهم، التأمل، المرونة.

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

References

- Afflerbach, Peter, David P. Pearson, and Scott G. Paris. 2008. Clarifying Differences between Reading Skills and Reading Strategies. *The Reading Teacher* 61 (5): 364–373.
- Amiri, Mehrdad, and Parviz Maftoon. 2010. *Awareness of Reading Strategies among Iranian High School Students*. In Proceedings of EDULEARN10 Conference (pp. 6782–6791).
- Ausubel, David. 1968. *The Psychology of Meaningful Verbal Learning: An Introduction to School Learning*. New York: Grune & Stratton.
- Brown, Douglas H., and Lee, Heekyeong. 2015. *Principles of Language Learning and Teaching* (5th ed.). Englewood Cliffs, N.J.: Prentice Hall Inc.
- Brown, Douglas H. 2007. *Teaching by Principles: An interactive approach to language pedagogy* (4th ed.). New York: San Francisco State University.
- Cain, Kate and Jane Oakhill. 2014. Reading Comprehension and Vocabulary: Is Vocabulary more Important for some Aspects of Comprehension? *L'Année Psychologique* 114 (4): 647–662.
- Chamot, Anna Uhl. 2005. Language Learning Strategy Instruction: Current Issues and Research. *Annual Review of Applied Linguistics* 25: 112–130.
- Chastain, Kenneth. 1988. *Developing Second Language Learning*. Harcourt Brace Jovanich.
- Connor, Kathryn M., and Davidson Jonathan R. T. (2003) Development of a New Resilience Scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18 (1): 76–82.
- Derakhshan, Ali, and Ali Malmir. 2017. The Contribution of General High-Frequency, Core-Academic, and Academic-Technical Words to ESP Reading Comprehension. *Issues in Language Teaching* 6 (2): 291–318.
- Dörnyei, Zoltán. 2005. *The Psychology of Language Learner: Individual Differences in Second Language Acquisition*. NJ: Lawrence Erlbaum Associates.
- Doron, S. 1993. *Reflectivity-impulsivity and their influences on reading for inference for adult students of ESL*. Unpublished MA Thesis, University of Michigan, Michigan.
- Ellis, Rod. 2003 *The Study of Second Language Acquisition*. Oxford: Oxford University Press.
- Elwér, Åsa. 2014. *Early Predictors of Reading Comprehension Difficulties*. Linköping: Linköping University Press.
- Eysenck, Sybil G., and Hans J. Eysenck. 1990. A Revised Version of the Psychoticism Scale. *Personality and Individual Differences* 6: 21–29.
- Fontana, David. 1995. *Psychology for teachers* (3rd ed.). London: Mackmillan Press Ltd.
- Friesen, Deanna C., and Bailey Frid. 2021. Predictors of Successful Reading Comprehension in Bilingual Adults: The Role of Reading Strategies and Language Proficiency. *Languages* 6 (1): 18. <https://doi.org/10.3390/languages6010018>
- Geil, Weinestain. 2014. Developing adult literacies. In Marianne Celce-Murcia, Donna M. Brinton, Marguerite A. Snow, and David Bohlke (eds.) *Teaching English as a second or foreign language* (4th ed.) (pp. 171–187. Boston: Heinle & Heinle.
- Gentaz Edouard, Sprenger-Charolles, Liliane, and Theurel, Anne. 2015. Differences in the Predictors of

- Reading Comprehension in First Graders from Low Socio-Economic Status Families with Either Good or Poor Decoding Skills. *PLoS ONE* 10 (3): e0119581. <https://doi.org/10.1371/journal.pone.0119581>
- Grabe, William, and Fredricka L. Stoller. 2011. *Teaching and Researching Reading* (2nd ed.). Harlow: Pearson Longman.
- Grabe, William, and Fredricka L. Stoller. 2014. Teaching Reading for Academic Purposes. In In Marianne Celce-Murcia, Donna M. Brinton, Marguerite A. Snow, and David Bohlke (eds.) *Teaching English as a second or foreign language* (4th ed.) (pp. 189–205). Boston, MA: National Geographic Learning.
- Harmer, Jeremy. 2015. *The Practice of English Language Teaching* (5th ed.). Edinburgh: Pearson Education.
- Harnish Robert M. 2005. *Minds, Brains, Computers: An Historical Introduction to the Foundations of Cognitive Science*. New York: Pearson.
- Hedge, Tricia. 2000. *Teaching and Learning in the Language Classroom*. Oxford: Oxford University Press.
- Jamieson, Joan. 1992. Cognitive Style of Reflectivity/Impulsivity and Field Independence/ Dependence and ESL Success. *The Modern Language Journal* 76 (4): 491–501.
- Jokar, Bahram, Syamak Samani, and Narges Sahragard. 2007. Resilience, Psychological Health, and Life Satisfaction. *Journal of Psychiatric and Clinical Psychology of Iran* 50 (3): 290–295.
- Kirby, Wycoff D., and Mark W. Fraser. 1997. Risk and Resilience in Childhood. In Jeffrey M. Mason and Mark W. Fraser (eds.), *Risk and Resilience in childhood* (pp. 10–33). Washington, DC: NASW Press.
- Levitt, Mary J., Nathalie Guacci-Franco, and Jerome L. Levitt. 1993. Convoys of Social Support in Childhood and Early Adolescence: Structure and Function. *Developmental Psychology* 29 (5): 811–818.
- Lightbown, Pasty M., and Nina Spada. 2013. *How Languages are Learned* (4rd ed.). Oxford: Oxford University Press.
- Luthar, Suniya S., and Dante Cicchetti. 2000. The Construct of Resilience: Implications for Interventions and Social Policies. *Development and Psychopathology* 12 (5): 857–885.
- Mackey, Alisonm and Susan M Gass. 2015. *Second Language Research: Methodology and Design* (2nd ed.). New York: Routledge.
- Malmir, Ali, and Parisa Mohammadi. 2018. Teachers' Reflective Teaching and Self-Efficacy as Predictors of Their Professional Success: A Case of Iranian EFL Teachers. *Research in English Language Pedagogy (RELP)* 6 (1): 117–138.
- Massonnié, Jessica, Maryse Bianco, Laurent Lima, and Pascal Bressoux. 2019. Longitudinal Predictors of Reading Comprehension in French at First Grade: Unpacking the Oral Comprehension Component of the Simple View. *Learning and Instruction* 60 (1): 166–179.
- Masten, Ann S. 2001. Ordinary Magic: Resilience Processes in Development. *American Psychologist* 56 (3): 227–238.
- Melendez, Mickey C. and Sandra Tomlinson-Clarke. 2004. Home, School, and Community: Catalysts to Resilience. In Caroline S. Clauss-Ehlers and Mark D. Weist (eds.), *Community planning to foster resilience in children* (pp. 311–325). New York: Kluwer Academic Publishers.

Resilience and Reflectivity as Predictors of L2 Reading Comprehension:
A Case of Iranian EFL Learners

- Memisevic, Haris, Admir Dedic, Inga Biscevic, Selmir Hadzic, Arnela Pasalic and Daniel Malec. 2020. Identifying Predictors of Reading Speed and Reading Comprehension in Bosnian. *Applied Neuropsychology: Child* 10 (4). DOI: 10.1080/21622965.2020.1815023
- Mervis, Carolyn B., Greiner C.de Magalhães, and Cláudia Cardoso-Martins. 2021. Concurrent Predictors of Word Reading and Reading Comprehension For 9-Year-Olds with Williams syndrome. *Reading and Writing* 34 (7). <https://doi.org/10.1007/s11145-021-10163-4>
- Messer, Stanley B. 1992. Reflectivity-Impulsivity: A Review. *Psychological Bulletin* 83 (24): 126–152.
- Momeni, Khatereh, and Parvaneh Karimi. 2010 Resilience in the students. *Proceedings of the Fifth National Conference on Student Mental Health*. Tehran, Iran.
- Mousavi, H. and Askari, A. 2010. *Investigate the relationship between resilience and academic achievement in students of Shiraz university*. Unpublished M.A. Thesis, Tehran University, Tehran.
- Murphy, Kimberly A. and Laura M. Justice. 2019. Lexical-level Predictors of Reading Comprehension in Third Grade: Is Spelling a Unique Contributor? *American Journal of Speech-Language Pathology* 28 (4): 1597–1610.
- Nassaji, Hossein. 2002. Schema Theory and Knowledge-Based Processes in Second Language Reading Comprehension: A Need for Alternative Perspectives. *Language Learning* 52 (3): 439–481.
- Nation, Kate, and Margaret J. Snowling. 2004. Beyond Phonological Skills: Broader Language Skills Contribute to the Development of Reading. *Journal of Research in Reading* 27 (4): 342–356.
- Oxford, Rebecca L. 1990. *Language Learning Strategies: What every Teacher Should Know*. New York: Newbury House.
- Perfetti, Charles. 2007. Reading Ability: Lexical Quality to Comprehension. *Scientific Studies of Reading* 11 (4): 357–383.
- Perfetti, Charles, and Joseph Stafura. 2014. Word Knowledge in a Theory of Reading Comprehension. *Scientific Studies of Reading* 18 (1): 22–37.
- Pirouznia, M. 1994. *The impact of impulsivity/reflectivity on EFL reading comprehension*. Unpublished M.A. Thesis. Tehran University, Tehran.
- Quinn, Jamie M. 2016. *Predictors of Reading Comprehension: A Model-Based Meta-Analytic Review*. Retrieved from http://purl.flvc.org/fsu/fd/FSU_2016SU_Quinn_fsu_0071E_13315
- Raudszus, Henriette, Eliane Segers, and Ludo Verhoeven. 2021. Patterns and Predictors of Reading Comprehension Growth in First and Second Language Readers. *Journal of Research in Reading* 44 (2): 400–417.
- Richards, Jack C., and Willy A. Renandya. 2000. *Methodology in Language Teaching: An Anthology of Current Practice*. New York: Cambridge University Press.
- Razmjoo, Ayat S., and Reza Mirzaei. 2009. On the Relationship between Dimensions of Reflectivity/Impulsivity as Cognitive Styles, Language Proficiency and, Gpas among the Iranian EFL University Learners. *Iranian Journal of Language Studies* 3 (1):105–124.
- Rezaei, Amir, Boroghani, Tahereh and Rahimi, Mohammad Ali (2013) Reflectivity/impulsivity as an important individual factor and effectiveness of awareness raising activities. *Sino-US English*

- Teaching*: 10 (4), 281–286.
- Riazi, Abdolmehdi and Riasati, Mohammad Javad (2007) Language learning style preferences: A students' case study of Shiraz EFL Institutes. *Asian EFL Journal* 9 (1): 97–125.
- Salimi, E. A. 2001. *On the relationship between impulsivity-reflectivity cognitive style and performance in TMU English proficiency test* (Unpublished Master dissertation). TMU Iran, Iran.
- Shang, Hui-Fang. 2010. Reading Strategy Use, Self-Efficacy and EFL Reading Comprehension. *Asian EFL Journal* 12: 18–40.
- Sheikholeslami, A. 2009. *Relationship of resilience and self-esteem and academic achievement in first-year high school student girl and boy*. Unpublished MA Thesis, Allameh Tabatabai University, Tehran.
- Shirazi, O. 2010. *Factors affecting students' self-regulated learning and resilience*. Unpublished MA Thesis, Allameh Tabatabai University, Tehran.
- Singhal, Meena. 2001. Reading Proficiency, Reading Strategies, Metacognitive Awareness and L2 Readers. *Reading Matrix* 1 (1): 1–9.
- Tabachnick, Barbara G. and Linda S. Fidell. 2007. *Using Multivariate Statistics (5th ed.)*. New York: Pearson Education.
- Talebi, M. 2012. *The relationship between upper-intermediate Iranian EFL learners' reflectivity style and use of formulaic expressions in news summary writing*. Unpublished M.A. Thesis, Azad University of Tabriz, Tabriz, Iran.
- Verhoeven, Ludo and Charles Perfetti. 2021. Universals in Learning to Read across Languages and Writing Systems. *Scientific Studies of Reading* 25 (2). DOI: 10.1080/10888438.2021.1938575
- Verhoeven, Ludo, Jan van Leeuwe and Anne Vermeer. 2011. Vocabulary Growth and Reading Development across the Elementary School Years. *Scientific Studies of Reading* 15 (1): 8–25.
- Waller, Margaret A. 2001. Resilience in Eco Systemic Context: Evolution of the Concept. *American Journal of Orthopsychiatry* 71 (3): 290–297.
- Wass, Malin, Lena Anmyr, Björn Lyxell, Elisabet Östlund, Eva Karltorp and Ulrika Löfkvist. 2019) Predictors of reading comprehension in children with cochlear implants. *Frontiers in Psychology* 10 (1). <https://doi.org/10.3389/fpsyg.2019.02155>
- Werner, Emmy E. 1995. Resilience in Development. *Current Directions in Psychological Science* 4 (1) : 81–85.