

Using Self-Regulated Learning Strategies in Enhancing Language Proficiency with a Focus on Reading Comprehension

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Received: January 1, 2014 Accepted: March 18, 2014 Online Published: May 15, 2014

doi:10.5539/elt.v7n6p160 URL: <http://dx.doi.org/10.5539/elt.v7n6p160>

Abstract

Self-regulated learning strategies have recently received a remarkable attention by researchers. The aim of this study was to explore the relationship between self-regulated learning strategies and students' language proficiency as well as their reading comprehension. To do so, 115 Iranian EFL university students were selected. First, a TOEFL test was given to the participants so as to determine their language proficiency and reading comprehension. Then, they were asked to fill out Self-Regulated Learning Strategies Questionnaire (Al Asmari & Mahmoud Ismail, 2012). To analyze the data, descriptive statistics and Pearson correlation were conducted. The results revealed that there is a significant relationship between the students' use of self-regulated learning strategies and their language proficiency. Also, a significant relationship between the students' use of self-regulated learning strategies and their reading comprehension was found. Finally, the pedagogical message of this study is that teachers and students should incorporate self-regulated learning strategies into their teaching and learning process.

Keywords: self-regulated learning strategies, language proficiency, reading comprehension

1. Introduction

The concept of learning a foreign language has commonly been misunderstood as just being able to speak in that language. In fact, learning a foreign language is not only a matter of speaking, but also a matter of reading, writing, and listening as well. Each of these skills has its own place and none of them should be neglected. On the other hand, "learning is not something that happens to students; it is something that happens by students" (Zimmerman, 1989, p. 21). Looking at the history of teaching methods, it is noticed that there has been a great shift from teacher-centeredness to student-centeredness. Therefore, learners direct their own learning process and hence become independent. This requires learners to be familiar with some skills and strategies. Consequently, teachers' task is to help them to improve self-regulatory skills (Zimmerman, Bonner, & Kovach, 1996). But, it is not enough; as Zimmerman et al. (1996) claimed, "many students who have knowledge of a learning strategy will not continue to use it unless their knowledge leads to appropriate goal setting, accurate strategic process and outcome self-monitoring, and greater self-efficacy" (p. 10), which compose their self-regulatory strategies. As self-regulated learning strategies (SRLSs) are good predictors of EFL learners' attainment (Ghanizadeh & Mirzaee, 2012; Judd, 2005; Mahadi & Subramaniam, 2013); therefore, developing these strategies in students will be helpful to become more strategic learners who take major responsibility for their own learning.

Self-regulation (SR) seems to be closely related to reading comprehension. Housand and Reis (2008) claimed that "some environmental conditions, such as organization of materials and clear expectations, support the development and use of self-regulated learning strategies in reading" (p. 109). James (2012) pointed out that there is a positive correlation between students' use of self-regulated reading strategies and an increase in their reading performance. Similarly, Ayatollahi, Rasekh, and Tavakoli's (2012) findings were likely to confirm the idea that part of the achievements in L2 academic reading ability can be the result of SRLSs and epistemological beliefs. Furthermore, Zarei and Hatami's (2012) research suggested that the relationships between self-regulated learning (SRL) components and reading comprehension knowledge of learners are mixed. Moreover, Al Asmari and Mahmoud Ismail (2012) found that some of the SRLSs are predictors of reading comprehension. Likewise, Yigzaw and Fentie (2013) revealed that elaboration, organizing and transforming, and also rehearsing and memorizing strategies are significant predictors of students' reading performance. Ghonsooly and Shirvan (2010)

showed that there is a significant positive correlation between EFL learners' motivational self-regulatory strategies and their L2 reading and writing attainments. However, Gelbar (2013) indicated that SRLSs are not predictors of reading comprehension over and above oral reading fluency and cognitive ability.

Though there are some research findings on the relationship between language learning strategies and language proficiency, not many traces can be located in the literature. To the best of the researchers' knowledge only Mirhassani, Akbari, and Dehghan (2007) revealed that there is a significant relationship between SRL and language proficiency. To make their claim stronger, it can be noted that according to Ting and Chao (2013), there is a relationship between students' level of linguistic competence and their action control strategy. In this regard, the aim of this study is to explore whether there is a relationship between SRLSs and language proficiency in general and in terms of reading comprehension in particular.

2. Method

2.1 Participants

The participants of this study were 115 MA (60) and BA (55) students of Islamic Azad University, Science and Research Branch, South Tehran Branch, North Tehran Branch, and Central Tehran Branch, majoring in TEFL. Their age ranged from 20 to 30.

2.2 Instrumentation

The instruments used in this study were a 4-point Likert-scale Self-Regulated Learning Strategies Questionnaire adapted from Al Asmari and Mahmoud Ismail (2012) which is composed of 42 items under eleven subscales: 1) Seeking information (4 items). 2) Self-reward (4 items). 3) Environmental control (4 items). 4) Peer learning (3 items). 5) Self-evaluation (4 items). 6) Rehearsal strategy (4 items). 7) Motivational environmental control (4 items). 8) Self-talk about efficacy (5 items). 9) Self-talk about performance (4 items). 10) Time management (3 items), and 11) Elaboration (3 items), and one version of the TOEFL which consists of two sections (section 1: structure and written expression & section 2: reading comprehension and vocabulary) and was used to measure the participants' language proficiency. The scores of the second section of the TOEFL were also considered as the participants' reading comprehension.

2.3 Procedure

2.3.1 Instruments Validation

2.3.1.1 Reliability Indices

To make sure of the reliability of both instruments, the Cronbach's alpha reliability was resorted to. Accordingly, the Cronbach's alpha reliability for the total questionnaire is .88.

Table 1. Cronbach's alpha reliability of self-regulated learning strategies

Cronbach's Alpha	N of Items
.886	42

The TOEFL subsections were also investigated in terms of their reliability indices. The K-R21 for language proficiency and reading comprehension tests are .99 and .97.

Table 2. K-R21 reliability indices of language proficiency and reading comprehension

	N	Mean	Variance	K-R21
Language proficiency	115	43.922	178.055	.99
Reading comprehension	115	38.200	179.583	.97

2.3.1.2 Construct Validity

A principal axis factoring through varimax rotation was carried out to underlying construct of the 13 tests (11 SRLSs, 1 language proficiency, & 1 reading comprehension) employed in this study. The assumptions of sampling adequacy and lack of multicollinearity are met. As displayed in Table 3, the KMO index of .91 is

higher than the criterion of .60. Thus, it can be concluded that the present sample size is adequate for the factor analysis.

Table 3. Tests of assumptions of factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.910
Bartlett's Test of Sphericity	Approx. Chi-Square	920.537
	Df	78
	Sig.	.000

The correlation matrix used to probe the underlying structure of the tests should not suffer from multicollinearity—too high correlations among all variables. The Bartlett's chi-square of 920.53 is significant ($P = .000 < .05$). Thus, it can be concluded that the assumption of lack of multicollinearity is also met. The SPSS extracted two factors as the underlying construct of the 13 tests employed in this study. This two-factor solution accounts for 58.67 percent of the total variance.

Table 4. Total variance explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.947	53.436	53.436	6.536	50.278	50.278	5.282	40.633	40.633
2	1.242	9.551	62.987	1.092	8.396	58.674	2.345	18.041	58.674
3	.730	5.613	68.600						
4	.703	5.409	74.009						
5	.606	4.663	78.672						
6	.545	4.195	82.867						
7	.488	3.757	86.624						
8	.436	3.357	89.981						
9	.344	2.648	92.629						
10	.333	2.563	95.193						
11	.295	2.266	97.459						
12	.250	1.921	99.380						
13	.081	.620	100.000						

Extraction Method: Principal Axis Factoring

The loadings of the 13 tests under the two extracted factors (Table 5) indicated that all components of the SRLSs load under the first factor which can be labeled as “self-regulated learning” factor; indicating that the construct of SRLSs questionnaire as a single trait enjoys construct validity. The language proficiency and reading comprehension tests load on the second factor which can be labeled as “language proficiency” factor. They both loaded on factor two each with separate and specific factor loadings indicating that they both enjoy their own specific construct validity being not only different from SRL but even distinct from each other.

Table 5. Rotated factor matrix

	Factor	
	1	2
Motivational environmental control	.783	
Environmental control	.728	
Peer learning	.720	
Self-talk about efficacy	.716	
Seeking information	.710	
Rehearsal strategy	.694	
Self-reward	.672	
Elaboration	.652	
Time management	.624	
Self-talk about performance	.618	
Self-evaluation	.563	
Reading comprehension		.953
Language proficiency		.875

2.3.2 Test and Questionnaire Administration

The TOEFL was first administered to the participants, so as to determine their language proficiency and reading comprehension. Then, the Self-Regulated Learning Strategies Questionnaire adapted from Al Asmari and Mahmoud Ismail (2012) was given to the participants in order to find out their use of these strategies.

3. Results

3.1 Data Analysis

First, the data were checked in terms of normality. Then, respect descriptive statistics were estimated. However, the bulk of the analyses were correlational analysis among the respect variables as explained and illustrated as follows.

3.1.1 Testing Assumptions

The research questions raised in this study were probed through the Pearson correlation that is, why three assumptions of interval data, independence of subjects and normality should be met (Filed, 2009). The preset data were measured on an interval scale and the subjects were independent that is, their performance on the tests is not affected by the performance of other subjects. The assumption of normality was also met. As displayed in Table 6, the ratios of skewness and kurtosis over their respective standard errors are within the ranges of +/- 1.96.

Table 6. Normality test

	N	Skewness			Kurtosis		
		Statistic	Statistic	Std. Error	Ratio	Statistic	Std. Error
Language proficiency	115	.230	.226	1.018	-.513	.447	-1.148
Reading comprehension	115	.368	.226	1.628	-.427	.447	-0.955
Seeking information	115	.183	.226	0.810	-.665	.447	-1.488
Self-reward	115	-.139	.226	-0.615	-.814	.447	-1.821
Environmental control	115	.079	.226	0.350	-.621	.447	-1.389
Peer learning	115	-.037	.226	-0.164	-.859	.447	-1.922
Self-evaluation	115	-.004	.226	-0.018	-.521	.447	-1.166

Rehearsal strategy	115	-.046	.226	-0.204	-.573	.447	-1.282
Motivational environmental control	115	-.121	.226	-0.535	-.517	.447	-1.157
Self-talk about efficacy	115	-.038	.226	-0.168	-.816	.447	-1.826
Self-talk about performance	115	.102	.226	0.451	-.734	.447	-1.642
Time management	115	.134	.226	0.593	-.809	.447	-1.810
Elaboration	115	-.129	.226	-0.571	-.504	.447	-1.128

3.1.2 Statistical Analyses

Before tackling the research questions, the descriptive statistics of SRLSs, language proficiency, and reading comprehension (Table 7) as well as the descriptive statistics of all components of SRLSs including 11 strategies (Table 8) are presented in order to give a full picture of the strategy use.

Table 7. Descriptive statistics of self-regulated learning strategies, language proficiency, and reading comprehension

	N	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic		Statistic	Statistic
Self-regulated learning strategies	115	20.0	117.0	66.243	1.8054	19.3607	374.835
Language proficiency	115	20.0	76.0	43.922	1.2443	13.3437	178.055
Reading comprehension	115	10.0	70.0	38.200	1.2496	13.4009	179.583

Table 8. Descriptive statistics of self-regulated learning strategies components

	No. of items	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic		Statistic	Statistic
Seeking information	4	2	12	6.37	.223	2.393	5.725
Self-reward	4	1	11	6.43	.228	2.450	6.001
Environmental control	4	1	12	6.11	.216	2.320	5.382
Peer learning	3	0	9	4.73	.191	2.053	4.216
Self-evaluation	4	1	11	6.27	.214	2.292	5.251
Rehearsal strategy	4	1	11	6.32	.217	2.327	5.413
Motivational environmental control	4	1	11	6.27	.231	2.472	6.111
Self-talk about efficacy	5	2	14	7.84	.274	2.934	8.607
Self-talk about performance	4	1	11	6.17	.231	2.482	6.162
Time management	3	1	9	4.79	.193	2.071	4.289
Elaboration	3	0	9	4.97	.192	2.062	4.254

To answer the first research question which is “Is there any relationship between self-regulated learning strategies and language proficiency?” the Pearson correlation coefficients were run. Obviously, language proficiency shows significant correlations with; A: Seeking information strategy ($R(113) = .49, P < .05$); B: Self-reward strategy ($R(113) = .45, P < .05$); C: Environmental control strategy ($R(113) = .44, P < .05$); D: Peer learning strategy ($R(113) = .42, P < .05$); E: Self-evaluation strategy ($R(113) = .29, P < .05$); F: Rehearsal strategy ($R(113) = .47, P < .05$); G: Motivational environmental control strategy ($R(113) = .37, P < .05$); H: Self-talk about efficacy strategy ($R(113) = .39, P < .05$); I: Self-talk about performance strategy ($R(113) = .49, P < .05$); J: Time management strategy ($R(113) = .40, P < .05$); and K: Elaboration strategy ($R(113) = .39, P < .05$).

Language proficiency has the highest correlation with seeking information strategy and the lowest correlation with self-evaluation strategy. It can then be concluded that the first null-hypothesis is rejected.

To answer the second research question which is “Is there any relationship between self-regulated learning strategies and reading comprehension?” the Pearson correlation coefficients were run. Based on the results, it can be concluded that reading comprehension shows significant correlations with; A: Seeking information strategy ($R(113) = .48, P < .05$); B: Self-reward strategy ($R(113) = .43, P < .05$); C: Environmental control strategy ($R(113) = .38, P < .05$); D: Peer learning strategy ($R(113) = .39, P < .05$); E: Self-evaluation strategy ($R(113) = .27, P < .05$); F: Rehearsal strategy ($R(113) = .47, P < .05$); G: Motivational environmental control strategy ($R(113) = .32, P < .05$); H: Self-talk about efficacy strategy ($R(113) = .38, P < .05$); I: Self-talk about performance strategy ($R(113) = .46, P < .05$); J: Time management strategy ($R(113) = .34, P < .05$); and K: Elaboration strategy ($R(113) = .36, P < .05$).

Reading comprehension has the highest correlation with seeking information strategy and the lowest correlation with self-evaluation strategy. In addition, the participants’ reading comprehension has the same correlation with both environmental control and self-talks about efficacy strategies. It can then be concluded that the second null-hypothesis is rejected.

4. Discussion

The findings indicated that there is a statistically significant relationship between students’ use of SRLSs and their language proficiency. Although many related studies have been conducted (e.g., Gharbavi & Mousavi, 2012; Lee, 2003; Pazhakh, 2006), few researchers have investigated the relationship between SRLSs and language proficiency. However, these findings are in line with Mirhassani’s et al. (2007) research findings that showed the positive relationship between these two variables. In addition, it was found that SRL is a good predictor of language proficiency. Moreover, findings revealed that all four subscales of SRL (planning, self-checking, effort, & self-efficacy) and language proficiency are positively correlated.

Also, the findings revealed that there is a statistically significant relationship between SRLSs use and reading comprehension. These findings are consistent with those of other studies exploring the correlation between EFL learners’ SRLSs and their reading comprehension (e.g., Ghonsooly & Shirvan, 2010; James, 2012) as well as some other studies narrowed down to discover whether SRLSs can predict the students’ reading comprehension ability (e.g., Al Asmari & Mahmoud Ismail, 2012; Yigzaw & Fentie, 2013) and hence reject Gelbar’s finding (2013) indicating that there is no relationship between SRLSs and reading comprehension.

This idea is supported by Oxford (1990) who proposed the six main categories of learning strategies. She emphasized on the crucial role of learning strategies and specifically metacognitive strategies as pivotal element of learners’ success. As SRLSs are mostly considered to be a subcategory of metacognitive strategies, their determining role cannot be ignored.

5. Conclusion

The results of the study revealed that EFL students’ language proficiency is highly correlated with their use of SRLSs. It can be claimed that more proficient students mostly rely on self-regulation rather than external regulation and use more SRLSs. In other words, they do not wait for teachers, teaching materials, and learning environments to regulate their own learning process. In addition, the findings showed that there is a significant relationship between SRLSs and EFL students’ reading comprehension. In other words, the development of SRLSs leads students to better comprehension. Therefore, it seems that the more the students apply SRLSs, the more likely they are successful in reading comprehension tests. With a degree of certainty, neglecting the SRLSs’ vital role makes students passive readers who are not able to set realistic and attainable goals, select and use effective strategies during their reading process in order to achieve those goals and finally self-evaluate their progress toward them.

In addition to such direct relationship between variables addressed in this study, it is safely concluded that there is a positive correlation between strategy use and cognitive processing in a sense that other mental activities in general and those of related to language processing such as perception and production of language input are subject to strategic attempts. In other words, strategic thinking and strategic endeavors may affect the way one processes speaking, listening, and writing skills. On the other hand, the more strategic one is, the more successful he is when engaged in language learning. Among these strategies, SR which was directly addressed in this study, may bear much more effects and contribution to processing language input at various stages and scenarios.

Moreover, positive correlation between SRLs and language proficiency gives similar insights so that one can move beyond just reading skill and generalize the conclusion to other skills and language inputs of whatever type.

Generally, the safe conclusion will be that strategy use, skill acquisition, and language proficiency are various but interdependent cognitive constructs; not necessarily in a cause and effect cycle.

Since SR plays a significant role in language learning, especially in the development of language skills and most specifically in reading, it is very important for the teacher to help students develop their self-regulatory capacity. Teachers need to employ strategic SR instruction in teaching reading skill. Syllabus designers and material developers can also foster students' SR by embedding activities and tasks that are specifically designed to promote students' self-regulatory capacity. Most specifically, policy makers should bear in mind that the designed courses should be flexible enough letting teachers introduce SRLs to their students and give them opportunities to practice these strategies which in turn would lead students to become autonomous and self-regulated learners.

References

- Al Asmari, A. A., & Mahmoud Ismail, N. (2012). Self-regulated learning strategies as predictors of reading comprehension among students of English as a foreign language. *International Journal of Asian Social Science*, 2(2), 178-201.
- Ayatollahi, M. A., Rasekh, A. E., & Tavakoli, M. (2012). Learner beliefs, self-regulated learning strategies and L2 academic reading comprehension: A structural equation modeling analysis. *World Applied Sciences Journal*, 17, 36-49.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage.
- Gelbar, N. W. (2013). *Examining the contribution of learning and study strategies on reading comprehension in secondary students with Dyslexia* (Doctoral dissertation, University of Connecticut). Retrieved from <http://digitalcommons.uconn.edu/cgi/viewcontent.cgi?article=6247&context=dissertations>
- Ghanizadeh, A., & Mirzaee, S. (2012). EFL learners' self-regulation, critical thinking and language achievement. *International Journal of Linguistics*, 4(3), 451-468.
- Gharbavi, A., & Mousavi, A. (2012). Do language proficiency levels correspond to language learning strategy adoption? *English Language Teaching*, 5(7), 110-122.
- Ghonsooly, B., & Shirvan, M. E. (2010). Validation of motivational self-regulatory strategies questionnaire and examination of its relation to L2 reading, L2 writing and use of language learning strategies. *Iranian Journal of Applied Language Studies*, 2(1), 31-62.
- Housand, A., & Reis, S. M. (2008). Self-regulated learning in reading: Gifted pedagogy and instructional settings. *Journal of Advanced Academics*, 20(1), 108-136.
- James, P. L. (2012). *Developing self-regulated readers* (Master's thesis, California State University). Retrieved from <http://csuchico-dspace.calstate.edu/bitstream/handle/10211.4/466/Final%20-%20Philip%20James.pdf?sequence=1>
- Judd, J. S. (2005). *The relationship between self-regulatory learning strategies and achievement of high school chemistry students* (Master's thesis, University of Hawaii). Retrieved from http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/10439/uhm_med_530_r.pdf;jsessionid=AD51A53C917EBFEE85B185AEDFAE7477?sequence=1
- King, C., & Stanley, N. (1989). *Building skills for the TOEFL* (2nd ed.). Hong Kong: Thomas Nelson and Sons.
- Lee, K. O. (2003). The relationship of school year, sex and proficiency on the use of learning strategies in learning English of Korean junior high school students. *Asian EFL Journal*, 5(4), 1-36.

- Mahadi, R., & Subramaniam, G. (2013). The role of meta-cognitive self-regulated learning strategies in enhancing language performance: A theoretical and empirical review. *Journal of Asian Scientific Research*, 3(6), 570-577.
- Mirhassani, A., Akbari, R., & Dehghan, M. (2007). The relationship between Iranian EFL learners' goal-oriented and self-regulated learning and their language proficiency. *Teaching English Language and Literature Society of Iran*, 1(2), 117-132.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Pazhakh, A. (2006). Second foreign language learning strategies and their variations across language proficiency levels among Iranian EFL learners. *InnOvaciOnes de NegOciOs*, 3(2), 301-315.
- Ting, K.-Y., & Chao, M.-S. (2013). The application of self-regulated strategies to blended learning. *English Language Teaching*, 6(7), 26-32. <http://dx.doi.org/10.5539/elt.v6n7p26>
- Yigzaw, A., & Fentie, A. (2013). The impact of students' self-regulated language learning on their reading achievement in Ethiopian high schools: Grade 9 in focus. *Journal of Media and Communication Studies*, 5(5), 44-51. <http://dx.doi.org/10.5897/JMCS2013.0345>
- Zarei, A., & Hatami, G. (2012). On the relationship between self-regulated learning components and L2 vocabulary knowledge and reading comprehension. *Theory and Practice in Language Studies*, 2(9), 1939-1944.
- Zimmerman, B. J. (1989). Models of self-regulated learning and academic achievement. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning and academic achievement: Theory, research, and practice* (pp. 1-25). New York: Springer-Verlag.
- Zimmerman, B. J., Bonner, S., & Kovach, R. (1996). *Developing self-regulated learners: Beyond achievement to self-efficacy*. Washington, DC: American Psychological Association.

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