

Self-Regulated Learning Strategies as Predictors of Reading Comprehension

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Abstract

The present study was conducted to investigate the relationship between self-regulated learning strategies and reading comprehension of Iranian EFL learners. The participants of the study were 119 Iranian B.A. and M.A. students majoring in English at Imam Khomeini International University in Qazvin and Islamshahr Azad University. The Michigan Test of English Language Proficiency was given to the participants to determine their language proficiency and reading comprehension. Then, the participants were asked to respond to the Self-Regulation Trait Questionnaire. The obtained data were analyzed using a stepwise multiple regression analysis. The results revealed that from among the six components of self-regulated learning strategies, only planning and effort components were significant predictors of reading comprehension. The results of the present study may be helpful for teachers, learners, and materials developers.

Key words: self-regulated learning strategies, reading comprehension

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1. Introduction

During the recent years, many studies have been conducted to investigate the relationship between reading comprehension and self-regulated learning strategies. As reading is an important skill in educational contexts, a clear understanding of the relationship between self-regulated learning and reading comprehension may help teachers and students develop a better appreciation of the importance of self-regulated learning in teaching and learning.

Self-regulation is a complex and multifaceted process, in which proactive learners apply strategies to achieve their goals (Clearly & Zimmerman, 2004). Zimmerman (2008) refers to self-regulated learning as a self-directed process which enables learners to acquire academic skills such as setting goals, selecting strategies and self-monitoring. By applying self-regulated learning strategies, students can monitor their learning process and become independent and responsible for their own learning. Self-regulated learners approach academic tasks with confidence and diligence, proactively seek out information needed, and find successful ways to overcome obstacles (Zimmerman, 1990). Therefore, teaching self-regulated learning strategies to unskilled readers helps them to become self-regulated learners and, as a result, their comprehension will improve.

Although many studies have been done in the field of self-regulated learning and reading comprehension, there seems to be a paucity of research on the relationship between them in second language learning. The purpose of this study is to investigate the predictive power of self-regulated learning strategies on reading comprehension.

2. Literature Review

2.1. *Self-Regulated learning*

Zimmerman (1989) was the first academic to propose the construct of self-regulated learning in educational psychology. According to Zimmerman (1990), "Self-Regulated learning strategies refer to actions and processes directed at acquisition of information or skills that involve agency, purpose, and instrumentality perceptions by learners" (p. 5). Pintrich (2000) states that self-regulated learning is "an active and constructive process whereby students set goals for their learning, and then try to monitor, regulate, and control their cognition, motivation, and behavior guided and constrained by their goals, and the contextual features in the environment" (p.453). Clearly and Zimmerman (2004) defined self-regulation as a complex process which, through influence on motivational variables, helps learners to direct their actions in achieving their goals. Later on, Zimmerman (2008) defined self-regulated learning as self-directed and proactive processes that enable learners to transform their mental abilities, and to acquire academic skills. Aregu (2013) defines self-regulated learning as an active learning process, in which learners employ different strategies to improve their cognition and performance, and to monitor their behavior.

Self-Regulated learners approach academic tasks with confidence and diligence, proactively seek out information needed, and find successful ways to overcome obstacles (Zimmerman, 1990). Bandura (2001) asserts that self-regulated learners guide their actions to attain their goals by setting goals and controlling their skills and effort. According to Cleary and Zimmerman (2004), "Self-regulated learners are proactive learners who incorporate various self-regulation processes (e.g., goal setting, self-observation, self-evaluation) with task strategies (e.g., study, time-management, and organizational strategies) and self-motivational beliefs (e.g., self-efficacy, intrinsic interest)"(p.538). They argue that before engaging in a learning process, self-regulated learners assess their previous performance against self-standards to make a plan for using appropriate strategies. Aregu (2013) concluded that students' self-regulated learning strategies are significant predictors of their achievement in reading tasks. As self-regulated learners monitor and evaluate their learning process, they are aware of their strengths and weaknesses, so they can employ the best strategies that suit their abilities (Mirhassani, Akbari, & Dehghan, 2007).

2.4.1. Components of Self-regulated Learning

Researchers have used different conceptual frameworks to explain the components of self-regulated learning. According to social cognitive theorists and based on the triadic reciprocal model, self-regulated learning is determined by three components (personal, behavioral, and environmental) in reciprocal fashion (Zimmerman, 1989). Each of these three factors affects the other two factors. Zimmerman believes that self-efficacy (learners' beliefs about their capabilities to fulfill a task) has a key effect on personal processes and that self-observation, self-judgment, and self-reaction (three subcategories in self-regulation) are three major categories of influence on the behavior process. He further maintains that the physical context and social experiences are considered as two major classes of environmental influence.

Pintrich and De Groot (1990) identified three components of self-regulated learning as follows:

- a) Metacognitive strategies for planning, monitoring, and modifying their cognition,
- b) Students' management and control of their effort on difficult tasks, and
- c) Actual cognitive strategies that students employ in their learning.

According to Schunk (1990), self-regulated learning involves two processes of goal setting and perceived self-efficacy, which are affected by three sub-processes including:

- a) Self-Observation: Zimmerman (1989) defines self-observation as students' self-monitoring their performance, which provides information about their behaviors and goals progressing. He introduced two common behavioral methods of self-observation: (a) verbal or written reporting, and (b) quantitative recording of ones' actions and reactions.

b) Self-Judgment: involves students comparing their performance with a goal or standard, and it can be achieved by two common ways of a) checking procedures, and b) rating their responses in relation to others' answers or an answer sheet (Zimmerman, 1989). Schunk (1990) asserts that the type of standards employed, goal properties, importance of goal attainment, and performance attributions are factors which affect self-judgment.

c) Self-Reaction: involves goal-setting, self-efficacy perceptions, metacognitive planning, and behavioral outcomes, in which the relations between these processes are reciprocal (Zimmerman, 1989).

Boekaerts (1996) conceptualizes two parallel and interrelated mechanisms of self-regulated learning: cognitive information processing system and motivational-emotional system, which focus on three levels of domain-specific knowledge, strategy use, and goals. He also claims that self-regulated learners have control over different dimensions of their learning process and have capacity to allocate resources to the different aspects of the learning process. Boekaerts presents a six-component model of self-regulated learning in which the first three components are under the cognitive system and the other three components are related to the motivational system:

Component 1: domain-specific knowledge and skills. Learning is a domain-specific process. Domain-specific knowledge entails conceptual and procedural knowledge. It has a strong association with information-processing components in a specific subject-matter domain. Boekaerts (1996) argues that all our knowledge is not domain-specific, because both domain-specific knowledge and domain-transcending knowledge are essential for learning.

Component 2: cognitive strategies. Cognitive strategies refer to cognitive actions and behaviors used by students to complete an academic task, such as elaboration, decoding, rehearsal, structuring, questioning, summarization, etc. Students should make a deliberate effort to transfer a strategy which has been acquired in one domain to another domain.

Component 3: cognitive self-regulatory strategies. Cognitive self-regulatory strategies refer to the cognitive processes and behavior employed by students to regulate their actions in order to achieve their goals. These strategies include three complex skills including: (a) Mental representation of learning goals, (b) Design of action plans, and (c) Monitoring progress and evaluating goal achievement.

Component 4: motivational beliefs and theory of mind. Learning is a process of interaction of beliefs, attitudes and values with specific learning situations. Motivational beliefs include four subcategories: (a) beliefs, attitudes and values related to tasks within the domain, (b) strategy beliefs, (c) capacity beliefs, and (d) goal orientation.

Component 5: motivation strategies. Motivation strategies are students' mindfulness and willingness to complete a task and to achieve a learning goal. Different types of motivation strategies are appraisal processes to create a learning intention, prospective and retrospective attributions, effort avoidance, coping strategies to reduce negative feeling, and using social resources.

Component 6: motivational regulatory strategies. These strategies refer to the students' willingness to use their personal resources and their capacity to execute their intentions. Motivational regulatory strategies include four complex skills of (a) Mental representation of behavioral intention, (b) Linking behavioral intention to action plan, (c) Maintaining action plan in the face of obstacles and competing action tendencies, and (d) Disengaging action plan and behavioral intention.

Zimmerman's (1998) cyclical model of self-regulated learning comprises four related steps: self-evaluation and monitoring, goal setting and strategic planning, strategy implementation and monitoring, and strategic-outcome monitoring. Each of these steps is explained as follows:

- First step (self-evaluation and monitoring): occurs when learners evaluate the effectiveness of their learning in relation to a specific learning task.
- Second step (goal setting and strategic planning): involves setting a specific goal, creating learning plans, and selecting appropriate learning strategies.
- Third step (strategy implementation and monitoring): occurs when students employ a particular strategy for structured contexts, and monitor their accuracy in applying that strategy.
- Fourth step (strategic-outcome monitoring): in this step, students focus on their learning outcomes and performances to achieve their optimal effectiveness (Zimmerman, 1998).

Zimmerman (2002, p. 66) states that self-regulation of learning is not a single personal trait that individual students either possess or lack. Instead, it involves the selective use of specific processes that must be personally adapted to each learning task. Zimmerman further asserts that in social psychologists' view, self-regulated learning process consists of three cyclical phases:

- Forethought phase: which occurs before learning includes two processes of task analysis and self-motivation. Task analysis involves goal setting and strategic planning. Self-motivation stems from self-efficacy, outcome expectations, intrinsic interest, and learning goal orientation.
- Performance phase: which occurs during behavioral implementation consists of two major classes of self-control and self-observation. Self-control refers to the use of specific strategies such as imagery, self-instruction, attention focusing, and task strategies. Self-observation refers to the self-recording and self-experimentation of the personal events and functions.
- Self-reflection phase: which occurs after learning and falls into two major classes of self-judgment and self-reaction. Self-judgment refers to the evaluation of self-observed performance against others' performance. Self-reaction involves feelings of self-satisfaction, positive affect, and adaptive and defensive responses.

Pintrich (2004) mentions four general assumptions that are involved in most self-regulated learning models:

- Active and constructive assumption, which means that learners have an active role in their learning process in setting goals, using strategies, and constructing meaning from internal and external information.
- Potential for control assumption, which is based on the potential role of the learners in controlling, monitoring, and regulating of their own cognition, motivation, and behavior in the learning process.
- Goal, criterion, or standard assumption, which means that learners should compare their learning process against some goals, criteria, and standards to evaluate their process.
- Mediator assumption, which emphasizes that learners' achievement and performance are influenced by both personal and contextual characteristics.

Moreover, Pintrich (2004) classifies self-regulated learning into four phases, including planning and goal-setting, monitoring, effort and control, and reactions and reflections. He holds that these four phases may hierarchically be structured as the individual progresses through the task, or may occur simultaneously. In the process of learning, self-regulated learners adapt their thoughts, emotions, and actions to direct their learning and to achieve their own goals (Boekaerts & Corno, 2005). Regarding different purposes for self-regulated learning, Boekaerts and Corno (2005) distinguish two parallel processes (top-down self-regulation and bottom-up self-regulation) for the purposeful direction of action. They assert that in top-down process, learners' personal learning goals direct the process of learning, in which learners approach the tasks in a motivated way and plan how to progress toward their goals. On the contrary, in the bottom-up process, feedback from the tasks and classroom gives a direction to learners to manage their styles and strategies in the learning process. The main purpose of the bottom-up self-regulation is to maintain the positive feelings of learners instead of persuading their goals.

Schraw, Crippen, and Hartley (2006) classify self-regulated learning into three components of cognition, metacognition, and motivation, and each component is divided into sub-components as explained below:

1) Cognition includes skills and strategies used by learners to encode, memorize, and retrieve information, and they are divided into three categories of skills and strategies:

- Cognitive strategies refer to skills used by learners to improve their learning process.
- Problem solving strategies are strategies which are employed to solve a problem when it develops in a specific task.
- Critical thinking includes strategies such as analyzing and reasoning, reflection, and drawing conclusions.

2) Metacognition includes skills that are employed by learners to understand and monitor their cognitive processes, and consist of two main components:

- Knowledge of cognition refers to what we know about our cognition, and is divided to three sub-components of declarative knowledge, procedural knowledge, and conditional knowledge.
- Regulation of cognition refers to three processes of planning, monitoring, and evaluation, which are involved in the learning process.

3) Motivation refers to learners' beliefs and attitudes involved in the use and development of cognitive and metacognitive strategies; it includes two sub-components:

□ Self-Efficacy beliefs refer to learners' beliefs in their capability to succeed in acquiring new information or solving a problem (Bandura, 1986).

□ Epistemological beliefs are "those beliefs about the origin and nature of knowledge" (Schraw et al., 2006, p.116).

Cheng (2011) defines self-regulated learning as a process in which "learners implement strategies by which they choose, use, monitor and adjust learning strategies and employ the strategies to control action in order to achieve specific learning goals" (p.5). He continues that self-regulated learning involves four sub-processes of (a) learning motivation, (b) goal setting, (c) action control, and (d) learning strategies.

Based on the Zimmerman's self-regulated learning theory, Toering, Elferink-Gemser, Jonker, Heuvelen, and Visscher (2012) present six components for measuring self-regulated learning, including planning, self-monitoring, evaluation, reflection, effort, and self-efficacy. In the present study, self-regulated learning strategies of the participants were investigated based on these six components, which are presented in Toering et al.'s Self-Regulation Scale.

2.3. Previous Studies

A number of studies have been conducted in the field of self-regulated learning strategies and reading comprehension. In one study, Zarei and Hatami (2012) investigated the relationship between components of self-regulated learning (planning, self-checking, effort, and self-efficacy) and L2 vocabulary learning and reading comprehension. 250 participants answered the vocabulary and reading comprehension subtests of the TOEFL test and the Persian version of 'Self-Regulation Trait Questionnaire'. The results of Pearson correlation procedure revealed that the correlations of self-checking, effort, vocabulary knowledge, and reading comprehension were significant, whereas those of planning, self-efficacy, vocabulary knowledge, and reading comprehension were not.

Al Asmari and Ismail (2012) conducted a cross-sectional study investigating self-regulated learning strategies as predictors of the reading comprehension of male and female university students. 248 EFL university students (112 males and 136 females) answered Self-regulated Learning Questionnaire and a reading comprehension test. The results of MANOVA indicated that there were differences between males and females in the use of self-regulated learning strategies in favor of females. However, there were differences between males and females in the reading comprehension test to the advantage of males. Moreover, the results of Multiple Regression Analysis showed that some of the self-regulated learning strategies such as rehearsal strategy, self-talk about efficiency, and elaboration were predictors of reading comprehension.

To investigate the effects of self-regulated learning strategies on critical reading, Aregu (2013) carried out a study with 140 students. The participants were selected to answer a Self-regulated Learning Strategy Use Scale and a Critical Reading Test. Results of multiple regression analysis showed that the use of self-regulated learning strategies had a significant effect on learners' performance in critical reading.

Maftoon and Tasnimi (2014) explored the effect of self-regulation on EFL learners' reading comprehension. To carry out the study, 149 Iranian EFL university students were assigned into experimental and control groups. The experimental group received direct teaching along with task-based instruction on self-regulation in reading in ten sessions. The findings revealed that the application of self-regulation in reading enhances EFL learners' reading comprehension.

To explore the relationship between self-regulated learning strategies and students' language proficiency as well as their reading comprehension, Abbasian and Hartoonian (2014) carried out a study with 115 Iranian EFL university students. TOEFL test and Self-Regulated Learning Strategies Questionnaire were administered to the sample. The results of descriptive statistics and Pearson correlation procedure showed a significant relationship between the students' use of self-regulated learning strategies and their language proficiency. The results suggested that more proficient students apply more self-regulated learning strategies. Furthermore, there was a significant relationship between the students' use of self-regulated learning strategies and their reading comprehension. In other words, self-regulated learning strategies assisted students to comprehend the texts better.

As the above short review suggests, various aspects of self-regulated learning and reading comprehension have been investigated. However, there seems to be a paucity of research as to the nature of the relationship between self-regulated learning components and EFL learners' reading comprehension. The aim of the present study is to partially address this gap and to answer the following question:

- Are there any significant differences among self-regulated learning strategies as predictors of reading comprehension?

3. Method

3.1. Participants

The participants of the present study included 160 male and female Iranian B.A. and M.A. students majoring in Teaching English as a Foreign Language, and English Translation at Imam Khomeini International University and Islamshahr Azad University. All of the participants were native speakers of Persian. A general proficiency test (Michigan Test of English Language Proficiency, MTELP) was administered to homogenize the participants in terms of their level of English language proficiency. After the administration of the Michigan Test of English Language Proficiency and taking the results into

account, the number of participants was reduced to 119. 41 participants were excluded from the study because they had a different level of proficiency.

3.2. Instruments

To collect data for the present study, the following instruments were utilized:

- 1) Michigan Test of English Language Proficiency
- 2) Self- Regulation Trait Questionnaire

3.2.1. Michigan Test of English Language Proficiency (MTELP)

To homogenize the participants, the Michigan Test of English Language Proficiency (MTELP) was administered. MTELP is one of the popular tests for measuring ESL or EFL learners' level of language proficiency. It includes 100 items in multiple choice format containing 40 grammar items, 40 vocabulary items and reading passages followed by 20 comprehension questions. Also, to measure the reading comprehension of the sample, the reading comprehension part of the MTELP, which contains 20 reading comprehension items in multiple-choice format, was used. It includes four reading comprehension passages each followed by five questions.

3.2.2. Self- Regulation Trait Questionnaire (SRTQ)

This indicator is a rating scale adapted from Teoring et al. (2012) to assess students' use of self-regulated learning strategies. This questionnaire, containing 50 items, consists of six sub-scales, each of them measuring one component of self-regulated learning strategies: planning (items 1-9), self-monitoring (items 10-17), self-evaluation (items 18-25), reflection (items 26-30), effort (items 31-40), and self-efficacy (items 41-50). The respondents were asked to choose from among five alternatives: 1) almost never, 2) seldom, 3) sometimes, 4) often, and 5) almost always. The reliability of this questionnaire was checked by Teoring et al. (2012), and Cronbach's alpha for each component of the questionnaire was as follows: planning=0.81, self-monitoring=0.73, self-evaluation=0.82, reflection=0.78, effort=0.85 and self-efficacy=0.81.

3.3. Procedure

To conduct the present study, the following procedure was followed:

First, 160 participants majoring in English translation and English teaching at Imam Khomeini International University and Islamshahr Azad University were selected.

Then, the Michigan Test of English Language Proficiency was administered to make sure that there was no significant difference among learners in terms of their proficiency level. The participants were allotted 60 minutes to answer the test.

To homogenize the participants, their scores on the general proficiency test were summarized, and the mean and standard deviation were computed. The scores of those who had scored more than one standard deviation above or

below the mean were excluded from all subsequent analyses. Also, the reading comprehension of the participants was checked using the Reading Comprehension subsection of the MTELP. As a result, the number of participants was reduced to 119.

In the next stage, the participants were asked to respond to Self-Regulation Trait Questionnaire. The participants had 45 minutes to answer this questionnaire. The collected data were then summarized and submitted to statistical analysis.

3.4. Data Analysis

To analyze the collected data and to answer the research question, multiple regression analyses were used. Multiple regression analysis was used to see which types of self-regulated learning strategies were better predictors of reading comprehension. The significance level of analyses was set at $p < 0.5$.

4. Results and discussion

4.1. Results

The present study attempted to see which components of self-regulated learning strategies are predictors of reading comprehension. To this end, a stepwise multiple regression analysis was used, the result of which is presented in Table 1. It indicates that of the six components of self-regulated learning strategies, only two of them, i. e. planning and effort could predict reading comprehension. The other components of self-regulated learning did not contribute to the regression model.

Table.1

Variables Entered/Removed^a

<i>Model</i>	<i>Variables Entered</i>	<i>Variables Removed</i>	<i>Method</i>
1	Planning	.	Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
2	Effort	.	Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).

a. Dependent Variable: reading comprehension

Table 4.2

Model Summary^c

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.518a	.269	.263	8.07977
2	.555b	.308	.296	7.89428

a. Predictors: (Constant), planning

b. Predictors: (Constant), planning, effort

c. Dependent Variable: reading

The result of model summary (Table 2) shows that planning and reading comprehension share over 26% of the variance. Planning and effort together

share more than 29% of the variance with reading comprehension. In other words, planning and effort explain about 29% of the total variance in reading comprehension.

The results of the ANOVA (Table 3) indicate that both F-values are statistically significant ($F_{(1,117)} = 43.00, p < .05$; $F_{(2,116)} = 35.80, p < .05$). The results show that the predictive power of both models is significant.

Based on Table 4, planning and effort, from among the six components of self-regulated learning strategies, account for a statistically significant portion of variance in reading comprehension. The first model indicates that for every one standard deviation change in planning score, there will be .51 of a standard deviation change in reading comprehension score. The second model shows that when planning and effort are taken together, for every one standard deviation change in planning and effort scores, there will be .38 and .24 of a standard deviation change in reading comprehension score, respectively.

Table 3
ANOVA^a on reading comprehension

<i>Model</i>		<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	2807.522	1	2807.522	43.006	.000 ^b
	Residual	7638.066	117	65.283		
	Total	10445.588	118			
2	Regression	3216.509	2	1608.254	25.807	.000 ^c
	Residual	7229.079	116	62.320		
	Total	10445.588	118			

a. Dependent Variable: reading

b. Predictors: (Constant), planning

c. Predictors: (Constant), planning, effort

Table 4
Coefficients^a of self-regulated learning strategies

<i>Model</i>		<i>Unstandardized Coefficients</i>			<i>T</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	-2.559	3.826		-.669	.505
	Planning	.725	.111	.518	6.558	.000
	(Constant)	-6.827	4.093		-1.668	.098
2	Planning	.534	.131	.382	4.063	.000
	Effort	.330	.129	.241	2.562	.012

a. Dependent Variable: reading comprehension

It can be concluded that two components of self-regulated learning strategies including planning and effort are predictors of reading comprehension. Therefore, the null hypothesis of the present study is rejected.

4.2. Discussion

The present study attempted to investigate the relationship between self-regulated learning strategies and reading comprehension. Results showed that

some of the components of self-regulated learning were predictors of reading comprehension. In the present study, self-regulated learning strategies included six components of planning, self-monitoring, evaluation, reflection, effort, and self-efficacy. The results of the stepwise multiple regression revealed that two components of self-regulated learning strategies including planning and effort were the best predictors of reading comprehension. This finding supports that of Al Asmari and Ismail (2012) and Abbasian and Hartoonian (2014), who showed that self-regulated learning strategies were predictors of reading comprehension. It also confirms those of Maftoon and Tasnimi (2014), that the application of self-regulation in reading enhances learners' reading comprehension. In addition, this finding seems to accord with that of Zarei and Hatami (2012), who reported a positive relationship between self-checking and effort and reading comprehension.

A number of factors might have contributed to the results obtained in this study. This study was conducted with a small sample size of participants (119). A small sample might be one reason for differences between the results of the present study and those of other studies.

Another reason may be the Iranian socio-cultural context in which students are used to following teachers' instructions and where classes are predominantly teacher-centered.

The other possible reason could be the participants' level of proficiency. The participants were all at intermediate proficiency level. Therefore, their tendency toward being autonomous was moderate. At the same time, they were not so much aware of the use of strategies. In addition, they may not have been proficient enough to self-monitor and self-evaluate, which are the components of self-regulated learning strategies.

Gender differences may be considered as another factor contributing to such differences in the findings. In the present study, gender differences were not taken into account. Studies such as Ismail and Sharma (2012), and Al Asmari and Ismail (2012) have emphasized the prominent role of gender differences in the use, choice and preference of self-regulated learning strategies.

Furthermore, the level of self-confidence and opportunities to use the target language in real environments can be addressed as other possible factors which may have brought about such findings. Iranian students have little (if any) opportunity to speak with native speakers of English. Therefore, these factors influence the students' self-efficacy and choice of the strategies.

5. Conclusion and Implication

The present study attempted to investigate the relationship between self-regulated learning strategies and reading comprehension. In this study, self-regulated learning strategies included six components of planning, self-monitoring, evaluation, reflection, effort, and self-efficacy. The results of the stepwise multiple regression showed that from among the six components of self-regulated learning strategies, only two of them, i. e. planning and effort, predict reading comprehension. Learners who plan before reading and put

more effort into their reading comprehend texts better. Therefore, instructions in self-regulated learning help learners become independent and responsible in their own learning. To sum up, it can be concluded that teachers and materials developers need to take care to provide learners with a sort of instruction which helps and encourages them to become self-regulated in their reading process, and, as a result, their comprehension will be improved.

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