

## The efficacy of Self-Regulated Strategy Development in Enhancing Intermediate Iranian EFL Learners' Metacognitive Awareness and Listening Skill

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### Abstract

In recent years different methods of language learning like Self-Regulation Strategy Development (SRSD) have been researched so as to instruct and train independent learners. The current study aimed to investigate the effect of SRSD on listening comprehension of Iranian EFL learners. To this end, 68 students from some language institutes in Shahrekord, Iran were selected to take part in the study. They were randomly divided into two class of control group and experimental one. The participants' age ranged from 15 to 30 they were both male and female. A pre-test was administered to both groups before the treatment and a post-test after the treatment. These two tests were adopted from First Certificate in English (FCE). A Metacognitive Awareness Listening Questionnaire (MALQ) was administered to the students as well in order to measure their metacognitive awareness. For the purpose of data analysis, both independent sample t-test and paired-sample t-test were run to investigate the significance in the learners' performance in terms of the treatment and a correlation was run to measure the metacognitive awareness. Based on the data analysis it was revealed that those who participated in the experimental group outperformed the students in the control group. And the high achievers in regard with metacognitive awareness highly correlated with the low achievers. To summarize, the results of the study showed that SRSD can be highly effective in learners' listening performance.

**Keywords:** self-regulation, self-regulated learners, metacognition, metacognitive strategies / skills

### INTRODUCTION

Listening, which was long the Cinderella of the four language skills (Mendelsohn, 1994), nowadays comes to assume a significant role in language learning theory. Listening is an important part of foreign language learning process, and it has also been defined as an

active process during which listeners construct meaning from oral input (Bentley & Bacon, 1996). Listening skill will develop faster than the other three skills and can affect reading and writing abilities in learning a new language (Vandergrift, 1997).

According to Feyten (1991), in daily communication, people allot 45% of time to listening, 30% to speaking, 16% to reading, and only 9% to writing. The listening skill is not only a rule of language but also acquisition of the second language skill (Vandergrift, 1997). However, as Rivers points out, listening comprehension is a very active skill. Far from being an act of reception it involves the construction of a message from phonic material (Cook, 2001). So, listening is an important part of the foreign language learning process.

Listening comprehension means the process of understanding speech in a second or foreign language. It is “the perception of information and stimuli received through the ears” (Richards, Platt, & Platt, 1992, p.153). For foreign language learners, it may easily cause confusion and misunderstanding if they cannot comprehend what people intend to express.

It is common knowledge that listening in English is an active skill requiring listeners to deal with a variety of complicated tasks, such as discriminating between sounds and interpreting stress and intonation. It is also known that listeners use a variety of mental processes to give meaning to the information to which they listen. These mental processes can be described as listening comprehension strategies. As indicated by Cohen (2000), many researchers in the field of second and foreign language (L2) listening agree on the idea that listeners often do not handle listening tasks in an effective way using these strategies. For a better understanding of listening strategies, especially cognitive ones, it is necessary to explain language learning strategies first.

In this study, “learning strategies are behaviors or actions which learners use to make language learning more successful, self-directed, and enjoyable” (Oxford, 1989, p.75). Cognitive Strategy Instruction (CSI) is an instructional approach which emphasizes the development of thinking skills and processes as a means to enhance learning. The objective of CSI is “to enable all students to become more strategic, self-reliant, flexible, and productive in their learning endeavors” (Scheid, 1993, p. 195). CSI is based on the assumption that there are identifiable cognitive strategies, previously believed to be used by only the best and the brightest students, which can be taught to most students (Halpern, 1996). Uses of these strategies have been associated with successful learning (Borkowski, Carr, & Pressley, 1987; Garner, 1990).

Self-Regulated Strategy Development Model (SRSD) is an implementation model for cognitive strategy instruction. According to Read (2005) “the goal of SRSD is to make the use of strategies habitual, flexible, and automatic (p. 286)”. The model is based on research work by Graham, et al. SRSD is based on well-established theory and has been thoroughly validated (Harris & Graham, 1996, 2005).

The SRSD instructional model includes six stages (Graham & Harris, 2005; Harris & Graham, 1996). Stage 1: Develop background knowledge (during this introductory stage,

the primary goal is to ensure that students will successfully understand, learn, and apply the strategy). Stage 2: Discuss it (The primary purpose of this stage is to ensure that students are motivated and willing to learn the new strategy). Stage 3: Model it (students are shown exactly how to use the new strategy). Stage 4: Memorize it (students become familiar enough with the steps in a strategy that they can use them automatically). Stage 5: Support it (students gradually assume responsibility for using the new strategy). Stage 6: Independent performance (students consistently use a strategy over time, in multiple settings, and with a variety of tasks).

To put all the above mentioned issues into nutshell, we had better go into the core of the problem of the learners. Self-regulation is one of the best ways for shy and introvert students who have problems communicating with others in real and face to face classes. In self-regulation contexts, these kinds of learners will be able to express their problems freely and with no anxiety to learn better. Therefore, they can control their own learning, set goals for themselves, and learn efficiently.

Cognitive strategy training is not part of many listening course books or curricula and teachers do not seem to pay attention to strategies while teaching listening. Listening does not receive its due importance and students do not seem to be sufficiently trained about the listening strategies (Seferoglu & Uzakgoren, 2004). Indeed, the researcher is going to perform the program in the institute; listening and speaking constitute only 15% of the overall evaluation. Goh (2008) emphasizes that more research is needed to investigate the role of cognitive instruction in listening performance in different contexts.

Considering the purpose of this study, we try to find strategies which have a great influence on listening performance, so we could use these findings to shed light on how listening should be taught effectively.

On the other hand, it helps teachers gain insights into how to provide more effective listening skill learning instructions suitable for learners with their subsequent individual differences. Based on the results of this study, EFL teachers can understand the link between listening strategy use and Self-regulatory capacities among their students, and in their instruction, stress on self-regulation capacities and the specific strategies those learners of different learning styles need while learning English.

Not all the problems described above can be overcome. But this does not mean that the teacher can do nothing about them. Since teaching listening skills is one of the most difficult tasks for any ESL teacher, successful listening skills are acquired over time and with lots of practice. It is frustrating for students because there are no rules as in grammar teaching. One of the ways to aid listening is to teach listening strategies.

In the light of this research, the aim of this study is to research on the effects of Self-Regulated Strategy Development Model (SRSD) on listening performance. Strategy instruction is a powerful student-centered approach to teaching that is backed by years of quality research. In fact, strategic approaches to learning new concepts and skills are often what separate good learners from poor ones.

In addition, strategy instruction supplies students with the same tools and techniques that efficient learners use to understand and learn new materials or skills. Findings help students learn to integrate new information with what they already know, in a way that makes it easier for them to recall the information or skill at a later time, even in a different situation or setting.

## **LITERATURE REVIEW**

Self-Regulation Strategy Development is thought to provide remarkable positive education environment for the learners so that they can learn effectively, and efficiently. In recent years, various teaching methods have been offered to compensate for the inadequacies observed in the previous methods, which have caused the coinage of specific definitions in the literature of L2 teaching and SRSD.

According to Zimmerman (1989; 1990) self-regulated learning have three main characteristics. At first, learners' internal motivation is stimulated. Secondly, the learners are involved meta-cognitively in the activities. Thirdly, the e-learners actively take precautions to construct their own learning modes. Bandura (1986, 1991) focuses mainly on the expectation of self-efficacy and its relationship with the behavioral motivation impact. Pintrich (1995) emphasizes that self-regulated learners would be able to attempt to supervise their behavior, motivation, and cognition and identify achievable goals.

Schunk (1996) argued that the self-regulated learning process involves motivation (self-instruction, attribution, achievement motivation, and task value) and cognition activities (meta-cognition, self-monitoring, and self-evaluation). Nahas et al. (2003) investigated the determining factors of physical activity in adolescents and young adults for high school and college physical education. They showed that behavior modification emphasizes on implementing self-regulation skills and increasing social support to ameliorate physical activity participation.

### **Empirical Background studies on self-regulation**

McWraw and Abrami (2001) carried out a research by accentuating on the causal relationships between goal orientation and motivation on the use of self-regulated learning strategies. It showed that high school students have depended on external sources (e. g., performance on test) to motivate themselves more than using learning just for the sake of learning to motivate them to learn. Tests have been used as a motivator to learn material on account of the importance the grade on the test has in relation to proving mastery of the objectives and attainment of the instructional goals. Assessment tools have also created test anxiety in some students, which has adversely affected performance by reducing student's motivation for learning.

Pressley and Ghatala (1990) acknowledged self-monitoring as the centerpiece of self-regulated thinking. McWhaw and Abrami (2001) issued 111 high school students a 1000word essay. Their study reported that self-monitoring was evident in the students whom were labeled high interest in comprehending the passage. The information

obtained from self-monitoring is used to determine one's goal progress. Self-monitoring is most the most helpful strategy when it is based on the specific conditions under which the behavior occurs.

Zimmerman and Martinez-Pons (1986) developed and validated a structured interview for measuring students actions directed at acquiring information or skills that involved agency, purpose, and instrumentality self-perceptions by learners. The self-regulated learning categories of the interview schedule were drawn from existing literature focusing primarily on social learning (cognitive) theory research. Some of the categories included goal setting, environmental structuring, self-consequence, self-evaluating, organizing and transforming, seeking and selecting information, and rehearsal and mnemonics strategies.

Rose (2010) utilized Tseng et al.'s instrument to investigate the Kanji learning strategies and self-regulation of the learners to broaden the understanding of how learners approach this difficult writing system. Self-regulated learning of Kanji was among tertiary level L2 learners of Japanese. In terms of self -regulation, the study found the ability to control emotions, manage commitments and control boredom and procrastination to be intertwined.

Ching (2002) conducted a study regarding an actual classroom implementation of strategy and self-regulation instruction. The aim of the researcher in this study was to find out whether instruction would help students to plan and revise their essays and to regulate their writing, and if it would improve their attribution, self-efficacy and self-determination. The findings demonstrated that strategy and self-regulation instruction had provided students with the knowledge. Therefore, it assists the learners to plan and revise their essays which was due to self-evaluation, organizing and transforming, seeking information and seeking social assistance.

Abar (2010) in a study investigated SRL in a sample population of 205 high-school students. He Used self-reports of seven aspects of SRL, three groups were identified: high SRL, low SRL, and average SRL. The results of the study were based on student self-reports of goal orientation showed that the high academic self-regulation group reported the highest levels of mastery orientation, while the low self-regulation group reported highest levels of avoidant orientation. The comparison of independently collected behavioral measures of study behaviors indicated that the group with the highest self-regulation tended to study more material and for a longer time than the group with the least self-regulation.

However, the relationship between learners' self-regulated learning (SRL) and their proficiency level was examined. For example, Dehghan (2005) carried out a research to investigate the relationship between Iranian EFL learners' goal-oriented and self-regulated learning and their language proficiency. The results of the study illuminated that there was a significant relationship between goal-oriented learning and language proficiency. Furthermore, it was proved that self-regulated learning and goal orientation were predictors of language proficiency. In order to gain a deeper

understanding of the nature of self-regulation, some of the previous researches on this construct as well as different proposed models of self-regulation SR will be presented in the following sections.

### **Metacognitive Awareness**

Metacognition is commonly believed that include metacognitive knowledge and metacognitive strategies or skills, which are considered as separate and distinct, but complementary components (Wenden, 1999). Metacognitive knowledge / Metacognitive awareness are two distinct terms which are commonly used interchangeably in the research literature. Metacognitive knowledge means the declarative knowledge one has about the interplay between personal characteristics, task characteristics, and available strategies in a learning situation (Flavell, 1979; Veenman & Spaans, 2005).

Metacognitive awareness in second language listening is thought to include listeners' general knowledge about human factors (such as cognitive and affective variables) which improve or inhibit their listening comprehension, and their specific knowledge of how these factors used in their experience of second language listening (including their perception of the difficulty presented by listening, their perceived ability as listeners, and their general self-efficacy beliefs). Recent categories of metacognitive knowledge also encompass listeners' abilities to evaluate the nature, purpose, and demands of a listening task, including the knowledge, skills and strategies required (Goh, 1997, 2000; Wenden, 1998, 1999, 2002).

### **Interrelationship of metacognition and self-regulation in general learning and academic achievement**

As it was previously mentioned, there is acceptable evidence that the metacognitive knowledge employed by the L2 listener likely plays a fundamental role in each of the L2 listening comprehension phases previously said, at all levels of L2 listening comprehension fluency.

In addition, there is a bunch of evidence that metacognition likely is a prerequisite to self-regulation (Butler & Winne, 1995; Fernandez-Duque, Baird & Posner, 2000; Shimamura, 2000). Neither a mental ability nor an academic performance skill, self-regulation refers to the self-directed process through which students act as metacognitively, motivationally, and behaviorally active participants in their own learning. In numerous subfields of educational research, this deliberate, judgmental, and adaptive process has been created as enabling learners to act more effectively when encountering academic tasks (Boekaerts, Pintrich & Zeidner, 2000; Tseng, Dornyei & Schmitt, 2006; Wenden, 1999; Zimmerman & Schunk, 2001).

Research on academic self-regulation has established that students' self-regulatory beliefs and processes are not only measurable, but are highly correlated with academic achievement, whether these two factors are measured using grade point average, achievement track in school, standardized tests, or task-specific measures. An abundance

of studies, in numerous fields of research, have also demonstrated that it is possible to teach self-regulated learning processes, and that these processes can significantly enhance students' achievement (Boekaerts, 1999; Boekaerts, Pintrich & Zeidner, 2000; Bolitho et al., 2003; Ehrman, 2000; Purpura, 1997, 1998; Winne, 1995, 2001; Zimmerman, 2000; Zimmerman & Risemberg, 1997).

## **THIS STUDY**

Considering the purpose of this study and in an attempt to trigger more research in the field of L2 listening in Iran, the research question for this study has been formulated as follows:

- Does SRSD instruction improve listening comprehension of Iranian EFL learners?
- To what extent can the application of SRSD enhance the intermediate Iranian EFL learner metacognitive awareness in developing their listening comprehension?

## **METHOD**

### **Participants**

207 students were randomly selected from language institutes in Shahrekord, Iran. In order to make sure that all the students were homogeneous, FCE listening placement test was administered to them. 157 of the participants got the intermediate criterion. They were both female and male native speakers of Persian, aged 15-30. 68 learners were randomly selected to take part in treatment. They were assigned into two groups (experimental and control) involved in the study (34 students each).

-Experimental group: they received Self-Regulation Strategy Development, which included a series of strategies, teaching how to cope with listening comprehension questions efficiently.

-Control group: they were present in their previous classes with their previous methods learning listening skills.

### **Materials**

In order to carry out the current research, the following instruments were used:

First Certificate in English (FCE) listening placement test: 30 listening comprehension questions were administered so as to ensure the homogeneity of the participants.

Pretest: FCE listening comprehension test was administered to measure the learners' listening comprehension ability before the treatment.

Posttest: another FCE listening comprehension test, parallel with the pretest was administered to measure the effectiveness of the type of instruction employed for each group.

Textbooks: Interchange” (Richards, 1997) and “Four Corners” (Richards & Bohlke, 2011) English teaching series.

The reliability of the tests was calculated using an alpha Cronbach method. In order to determine the content validity of the tests, experts’ views were obtained and applied.

## Procedure

The experiment lasted for ten weeks (roughly three months) on Saturdays and Wednesdays for the experimental group and Tuesday and Sundays for the control group. A full account of each stage is given below.

Two classes of the same level of proficiency were randomly selected for the purpose of the study. The participants of this study were 68 students. There were 34 in the experimental group, 34 in the control group in a Language Institute in Shahrekord. The participants were both male and females in both classes.

For the current study two groups pretest – post-test experimental design was used. In two –group pre-test – post-test designs, two groups were measured and observed.

First, a FCE listening placement test was administered to specify the homogeneity of the two groups in terms of listening performance. Moreover, participants in both groups had been placed as intermediate at the beginning of the term by the administration of the post-test in accordance with their proficiency exam results. Then, the listening cognitive strategies (Self-Regulated Strategy Development) instruction was carried out for twenty-five sessions in the experimental group during which the control group received only listening training without any strategies instruction. After the instruction, a post test was administered to find whether the cognitive strategies instruction leads to any significant difference in participants’ listening performance in the experimental group. After data collection, independent sample t-test and paired-sample t-test was applied using SPSS program to analyze the data.

## RESULTS

### Pretest

A pretest was run to evaluate participants’ performance in regard with listening comprehension questions. The descriptive statistics of participants’ mean scores on the pretest of the two groups is displayed in table 1.

**Table 1.** Descriptive Statistics of the Pretest across Experimental and Control group

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test control	34	3.00	27.00	14.76	5.93
Pre-test experimental	34	4.00	28.00	15.35	6.89
Valid N (listwise)	34				

The participants of listening comprehension in the control group had an overall mean score of 14.76 in the pre-test. For the experimental group, participants of experimental group with Self-Regulation Strategy Development had an overall score of 15.35.

### Research Question 1

In order to answer the first research question, a paired-samples t-test was run. The aim of the t-test was to compare the obtained mean scores of the participants on the pretest and posttest to demonstrate the effectiveness of the treatment. Tables 2 and 3 show the descriptive statistics and the results of Paired samples t-test for the two groups, respectively.

**Table 2.** Descriptive Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest experimental	15.29	34	6.99
	Posttest experimental	21.02	34	7.04

**Table 3.** Paired-samples t-test results for pretest and posttest scores

	Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
Pair 1 pretest scores - posttest scores	-5.73	3.26	.56	-10.23	33	.000

A paired-samples t-test was conducted to evaluate the impact of the intervention on students' scores on the Self-Regulation Strategy Development (SRSD). There was a statistically significant increase in SRSD scores from Time 1 that is the pre-test time ( M = 15.29, SD = 6.99) to Time 2 i.e. the post-test time ( M = 21.02, SD = 7.04),  $t(34) = 5.39$ ,  $p < .0005$  (two-tailed). The mean increase in SRSD scores was -5.73 with a 95% confidence interval ranging from -6.87 to -4.59. Given our eta squared value of 0.76 it can be concluded that there was a large effect before and after the intervention.

### Research question 2

In order to analyze the data in the questionnaire, each student's mean score was calculated in accordance with his or her answers in the questionnaire. As far as the questionnaire is concerned with the effect of SRSD on the metacognition of the students, those who got obtained higher (above 33 percent) and lower means (below 33 percent) were separated. A correlation was run to estimate the correlation between the high achievers and low achievers.

**Table4.** Correlations

		mean	high achievers
Spearman's rho	mean	Correlation Coefficient	.996**
		Sig. (2-tailed)	.000
	high achievers	N	26
		Correlation Coefficient	.996**
	high achievers	Sig. (2-tailed)	.000
		N	26

The relationship between high achievers of and low achievers of metacognition was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, positive correlation between the two variables,  $r = .96$ ,  $n = 51$ ,  $p < .001$ , with high achievers and low achievers of metacognition.

## **DISCUSSION AND CONCLUSION**

The current study aimed at investigating the effects of Self-Regulation Strategy Development on listening comprehension of Iranian EFL learners. And it also intended to investigate the effect of SRSD on intermediate Iranian EFL learners' metacognitive awareness in developing their listening comprehension.

The issue which often received the most focused on in the literature is the accuracy of Self-Regulation Strategy Development. But in this study and particularly in the first research question, an attempt was made to find out the effect of Self-Regulation Strategy Development on a particular skill i.e. listening comprehension. The language learners in this study who were trained to do self-regulation strategies were likely to have better listening comprehension. Actually, this study indicated that teaching students self-regulation strategies seemed to help develop student monitoring and regulating of their learning of listening comprehension. Students were gradually able to self-track areas of strength and weakness and set some clear goals for improvement. These results might be due to the effect of active learning on students' understanding and achievement.

As it was mentioned in the literature, according to Sawyer et al. (1992), Schunk (1983), Pressley and Ghatala (1990), and Ommundsen (2003) who conducted research in the field of self-regulation strategies and experimental studies in this area, on the whole, showed that performing Self-Regulation Strategy Development helped the learners extensively. Those studies demonstrated that instructing students with SRSD can have drastic change in their results of the post-tests. Therefore, it can be concluded from the literature that those previous studies on this subject show that teaching SRSD provided the students with a great assistance in regard with their dealing with the related tests and subjects.

The results shown in the previous chapter are in line with the presented literature in chapter 2. So, the findings of this study added more evidence in support of applying SRSD in classroom in order to have more efficient learners. On the one hand, it is worth mentioning that teaching SRSD places a remarkable effect of students' final performance and longer retention of instructed materials. This method is both applicable and plausible to be used in EFL classrooms in Iran, and the researcher found no barrier on the way of adding this method into the teachers' syllabus.

The latter research question deals with metacognition. To delve more into this question, it is apt to state that SRSD intends to seek the extent of influence of Self-Regulation Strategy Development on their metacognitive awareness in their listening comprehension. To gather data a questionnaire was administered to the learners. The

findings of the study showed that there was a positive change in the students' behavior regarding tackling this method. There was a high positive correlation between the low achievers and high achievers of this technique.

In the literature it was mentioned that Empirical studies have shown that an important distinction between skilled and less skilled L2 listeners lies in their use of metacognitive strategies (e.g., Bacon, 1992; Goh, 1998, 2000; O'Malley & Chamot, 2001; Vandergrift, 1998, 2003). O'Malley et al. (1989) illustrates that skilled listeners use more avoiding and repair strategies to redirect their attention back to the task when there is a comprehension breakdown, whereas less skilled listeners give up and stop listening. Vandergrift (2003) found that skilled listeners use twice as many metacognitive strategies as their less-skilled counterparts.

As stated in the literature, listening high achievers are regarded as skilled listeners and listening low achievers are called less skilled listeners. Thus, it can be concluded that those high achievers outperform in their performance concerning the issue of listening comprehension skill. The results of the current study and the literature showed a harmony toward this matter. The findings of the empirical studies in the literature in chapter two supported the findings of this research, too. It can be easily deduced that being a skilled listener is of paramount importance for the learners and enhances their ability and efficiency in regard with those listening comprehension questions and listening skill in general.

The findings of this study brought about some pedagogical implications for EFL curriculum developers, teachers, learners, and those preparing listening comprehension textbooks.

Due to the benefits of SRSD reported in the current research, the findings showed that focusing learners' attention on the self-regulation strategies and metacognition boosts the rate of listening comprehension learning. Moreover, the findings demonstrated that SRSD instruction help learners direct their goals. On the whole, they will be able to control, and manage their own learning as well.

There were some limitations in this study which should make the reader cautious about generalizing the findings to other situations. And also in the history of language teaching, there used to be a hot debate about which methods the teachers need to apply to the teaching-learning process. However, in modern language teaching today, teaching and learning based on the student profiles provides further advantages for the language learner and the teacher to meet the program goals and objectives.

The researcher could not control the age, sex, and educational background of the participants. Furthermore, the study was intended to make use of male and female learners to the same degree, but since the participants of this study were studying English in a language institute as foreign language, the researcher had serious problems finding as many participants as she wished. The participants were male and female, intermediate; so, the findings cannot be generalized to higher level populations and males, too.

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