

## INVESTIGATING THE RELATIONSHIP BETWEEN THE USE OF METACOGNITIVE STRATEGIES AND PRONUNCIATION OF IRANIAN EFL LEARNERS

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### ABSTRACT

*According to O'Malley and Chamot (1990) and Oxford (1990), From among different learning strategies, metacognitive ones help learners to become more self-directed and encourage learner autonomy. Recent developments in the domain of language teaching have led to changes in pronunciation pedagogy as well. The present study aimed at investigating the possible relationship between the use of metacognitive strategies and pronunciation of Iranian EFL learners. For this purpose, a Preliminary English Test (PET) was used to homogenize the participants of the study. After gathering the students' scores in Pronunciation Test and Questionnaire, their descriptive statistics and correlation were calculated through Pearson Correlation. The correlation between pronunciation test and questionnaire was significant. Therefore, it has been revealed that there was a significant relationship between questionnaire and pronunciation scores of the participants. Thus, the learners who were aware of metacognitive strategies and use them beside cognitive ones in pronouncing words, have better, more easily understandable and native-like pronunciation. In other words, the more metacognitive strategies learners study, learn and utilize, the better pronunciation they have. The result of this study can be useful for both EFL and ESL learners and teachers. The EFL or ESL learners who want to have a correct, fluent and native-like pronunciation should learn and utilize the metacognitive strategies beside the cognitive strategies.*

**Keywords:** Metacognitive Strategies, Cognitive Strategies, Pronunciation, Learning

### INTRODUCTION

In the field of English as a Second Language (ESL) the necessity for, and method of, teaching pronunciation has become a controversial topic. Many second language educators have varied opinions on the importance of including pronunciation practice within their lesson plans. Classroom activities should cater to what their students consider their most important personal goals or reasons for learning the language. For example, students may wish to build their vocabulary skills or strengthen their testing skills in English. Regardless of current trends or what students may feel their selected needs are, it is safe to say that teaching pronunciation is often considered essential in an ESL class where survival skills are imperative to the students' daily lives. In an ESL setting, the students must not only increase their English comprehension for the classroom, but also need to communicate and interact in English outside the class in various situations.

O'Malley and Chamot (1990, p. 29) define learning strategies as "special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information" and classify these strategies into three major types: metacognitive strategies, cognitive strategies, and social/affective strategies. Drawing on the research by O'Malley and Chamot (1990) and Oxford (1990) enables us to compile a most comprehensive classification of

language learning strategies with six major categories. The direct strategies consist of memory strategies, cognitive strategies, and compensation strategies; the indirect category contains metacognitive strategies, affective language learning strategies, and social strategies. Oxford (1990b, p.71) distinguishes between direct language learning strategies (LLS), "which directly involve the subject matter", i.e. the second language (L2) or foreign language (FL), and indirect LLS, which "do not directly involve the subject matter itself, but are essential to language learning nonetheless". One point to note about the learning strategies is that they "are not the preserve of highly capable individuals, but could be learned by others who had not discovered them on their own" (O'Malley & Chamot, 1990, p. 31).

Following the rise of communicative approaches to second/foreign language teaching, the idea of applying the learner strategies to language teaching has gained worldwide popularity. Applied research on language learning strategies investigates the feasibility of turning students into more effective language learners by teaching them the cognitive and metacognitive strategies (O'Malley & Chamot, 1990). Empowering learners with learner strategies, as Wenden (1992) notes, will facilitate language learning by developing autonomous, self-regulated learners in a student-centered model. From among different learning strategies metacognitive ones, according to O'Malley and Chamot (1990) and Oxford (1990), help learners to become more self-directed and encourage learner autonomy.

Nearly most of the students do not use metacognitive strategies in pronunciation learning because they are rather uncommon, difficult and unknown to them. In contrast, it can be said that, almost all students get benefit from the cognitive strategies. Inasmuch as they are very common, easy and simple, every individual with different learning styles and even Intelligence Quotient (IQ) can learn and use them. As metacognitive strategies are of paramount importance in comparing with cognitive ones, and they play a great role in learning different skills especially speaking and pronunciation, learners and teachers who are not aware of these strategies, sometimes are not successful in learning the near native pronunciation and accent of English language.

Yet, very few studies have been conducted in Iran to investigate the relationship between learning strategies especially metacognitive strategies and pronunciation learning of Iranian students learning English as a foreign language. Hence, this study has the objective of shedding light on the relationship between the use of metacognitive strategies and the pronunciation of Iranian EFL learners.

## REVIEW OF THE LITERATURE

Compared with other learning strategies, metacognitive ones have received less attention in language learning. Metacognitive knowledge, according to Flavell (1985), is the acquired knowledge about cognitive processes which can be classified into three categories: knowledge of person variables, task variables, and strategy variables. Wenden (1998) also, in her work on learner autonomy, has strongly advocated helping language learners develop metacognitive knowledge in order to self-appraise and self-regulate their learning. These strategies are actions which go beyond cognitive devices to help learners coordinate their own learning. They can control their learning by using such factors as centering (C), arranging (A), planning (P), and evaluating (E) (Oxford, 1990). The acronym of CAPE confirms that strategic learners



should have metacognitive knowledge about their own thinking and learning approaches as well as the ability to self-assess that. Metacognitive strategies ‘are higher order executive skills that may entail planning for, monitoring, or evaluating the success of a learning activity’ (O’Malley and Chamot, 1990, p. 44); In other words, they are strategies *about* learning rather than learning strategies themselves. They are divided into nine types:

- advance organisers: planning the learning activity in advance at a general level — “You review before you go into class”;
- directed attention: deciding in advance to concentrate on general aspects of a learning task;
- selective attention: deciding to pay attention to specific parts of the language input or the situation that will help learning;
- self-management: trying to arrange the appropriate conditions for learning — “I sit in the front of the class so I can see the teacher”;
- advance preparation: ‘planning for and rehearsing linguistic components necessary to carry out an upcoming language task’ (O’Malley et al., 1985a, p. 33);
- self-monitoring: checking one’s performance as one speaks — “Sometimes I cut short a word because I realise I’ve said it wrong”;
- delayed production: deliberately postponing speaking so that one may learn by listening — “I talk when I have to, but I keep it short and hope I’ll be understood”;
- self-evaluation: checking how well one is doing against one’s own standards;
- self-reinforcement: giving oneself rewards for success.



Based on Oxford’s (1990a) definition of learning strategies, pronunciation learning strategies can be taught as steps taken by students to enhance their own pronunciation learning. While there appear to be no published studies that deal with pronunciation learning strategies separately from other study (Peterson, 2000), a few investigations have looked at pronunciation as one of a number of skills associated with learning style use. O’Malley et al. (1985a) asked 70 high-school ESL students about the learning strategies they used to help them with nine different oral language tasks, one of which was pronunciation. They stated that students reported using numerous learning strategies for pronunciation. However, their results were not reported in such a way as to indicate which specific strategies may have been used for pronunciation learning.

Two older studies do however, document a number of language learning strategies that were used specifically for pronunciation learning. Naiman et al. (1978) conducted interviews with 34 good language learners, asking them to describe their language learning experiences. A number of strategies involved in pronunciation learning emerged, as they did from the diary of Rivers (1979), who recorded her own experiences learning Spanish, her sixth language, during five weeks abroad. She published her diary without analysis, but several pronunciation learning strategies and tactics are seen clearly at work. The present study was strongly influenced by Avery and Ehrlich (1992) who concluded that to attain native-like pronunciation in a second language or foreign language, learners must be made aware of aspects of their pronunciation that result in other people being unable to understand them. Therefore, the research question of the study once again:

Is there any statistically significant correlation between the use of metacognitive strategies and pronunciation of Iranian EFL learners?

## METHODOLOGY

### *Participants*

Initially, 40 female students studying at Chitsazan Language Institute were selected in intermediate level. After the students participated in all parts except writing of the Preliminary English Test (PET) as an English proficiency test, 30 of initial participants whose scores were between one standard deviation minus and plus the mean were selected. The age range of students was 16 to 22 and they were all from Tabriz with their first language being Azari Turkish and second language as being Farsi.

### *Instrumentation*

Three types of instruments were used to collect data. The first one was the Preliminary English Test (PET). It was administered to examine the English proficiency of the learners and to select a homogeneous sample (see appendix A). As the study was basically on production and oral skills, the writing section of the test was eliminated. So the test included speaking, listening and reading sections.

The second instrument was test of pronunciation. A reading aloud pronunciation test developed by the researcher was used to examine the pronunciation of the participants at the beginning of the study and to select the sample. The test battery included 36 single words, 20 sentences each containing 2 to 4 words, and a short passage comprising 12 words. The words to be tested were selected among reading comprehension texts of students' course book.

The third instrument was pronunciation learning strategies questionnaire. A 15-item questionnaire of pronunciation learning strategies was developed by the researcher based on the O'Malley et al. (1985) and Oxford (1990) classification. It consisted of 15 metacognitive learning strategies that were most frequently used by learners for pronunciation learning. The questionnaire was piloted with a group of EFL learners to check its reliability. The content validity was also checked by some experienced teachers.

### *Procedure*

First, the PET was administered to a group of 40 students to select the sample as the starting point of the study. The sample answered all parts of the test except writing. The necessary instructions as how to do the test were given before starting the test. At the beginning of the test, two parts of speaking section were administered to individual students and other parts were administered in the form of couples who were communicating with each other. The approximate time to individually done parts was 2-3 minutes and for the pair works was 3 minutes. Then, the listening part composed of 4 parts including multiple choice, Yes/No and cloze test questions was administered to the sample in approximately 35 minutes. The reading part of PET composed of 5 parts and 35 questions was administered to the students. Finally, 25 students whose scores in the PET were between one standard deviation minus and plus the mean were selected as the participants of the study.

The second test, reading aloud pronunciation test, which was developed by the researcher was used to examine the pronunciation of the students. After recording the participants' performance during the test, each word's pronunciation was compared and checked with the



exact and clear pronunciation of the Longman pronunciation dictionary. Any subtle inconsistency was not accepted so that word was considered as a wrong item.

The third instrument was a questionnaire of pronunciation learning strategies. This questionnaire developed by the researcher was based on the O'Malley et al. (1985) and Oxford's (1990) classification including of 15 metacognitive learning strategies that are most frequently used by learners for pronunciation learning were given to all 25 students who were selected after the PET. After ranking the scores of test of pronunciation and pronunciation learning strategies questionnaire, the correlation between the scores was computed and the comparison of the results provided the researcher with information required for answering the research question.

### *Design*

The design of the study was ex-post facto or correlational design which can be categorized as a kind of descriptive research design. The independent variable in the study was the use of strategies by the participants, and the dependent variable was their pronunciation accuracy as operationalized in terms of scores obtained from a researcher-made pronunciation test.

### *Data analysis*

The data which were collected by three instruments in the study were analyzed statistically in order to examine the null hypothesis developed and find answer for the research question. The descriptive statistics were found for the scores obtained from the PET, and the Pearson coefficient of correlation was calculated to examine the relationship between the scores obtained from the strategies questionnaire with the scores obtained from the test of pronunciation. The level of significance for the rejection of the null hypothesis was set at .05. The details of the data analyses and the related statistical tables and figures are presented in Chapter Four.



## **RESULTS**

### *The Results of the English Language Proficiency Test*

As it was stated in Chapter Three, a Preliminary English Test (PET) was used to homogenize the participants of the study. Table 1 shows the descriptive statistics of the participants' PET scores.

**Table 1. Descriptive Statistics of the Participants' PET Scores**

	N	Minimum	Maximum	Mean	Std. Deviation
PET	40	38	72	60.23	9.799
Valid N (listwise)	40				

Overall mean and standard deviation of the initial participants' PET scores were 60.23 and 9.799 respectively. From these initial participants, those whose scores were within minus and plus one standard deviation were selected and others were left out. In other words, 29 students whose score were between 50.44 and 70.02 were chosen.

### *The Result of the Correlation between Students' Scores in Pronunciation Test and Students' Scores in Questionnaire*

After gathering the students' scores in Pronunciation Test and Questionnaire (see Appendix), their descriptive statistics and correlation were calculated through Pearson Correlation which



are presented in Table 2 and 3 respectively.

**Table 2. Descriptive Statistics for the Pronunciation and Questionnaire**

	N	Minimum	Maximum	Mean	Std. Deviation
Questionnaire	25	2.00	15.00	9.4400	3.35510
Pronunciation	25	6.00	20.00	13.3200	4.03856
Valid N (listwise)	25				

**Table 3. The result of Pearson Correlation**

#### Correlations

		Questionnaire	Pronunciation
Questionnaire	Pearson Correlation	1	.955(**)
	Sig. (2-tailed)	.	.000
	N	25	25
Pronunciation	Pearson Correlation	.955(**)	1
	Sig. (2-tailed)	.000	.
	N	25	25

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

As it is indicated in Table 3, the correlation between pronunciation test and questionnaire was significant. Thus, it can be claimed that there was a significant correlation between metacognitive strategies and pronunciation of the participants. According to the results presented in Table 3, the coefficient value was 0.955 and the p-value observed was 0.000. The amount of p-value was smaller than the level of significance selected for this study ( $\alpha=0.05$ ). Therefore, it has been revealed that there was a significant relationship between questionnaire and pronunciation scores of the participants. In other words, the null hypothesis of no significant relationship between using metacognitive strategies and pronunciation of Iranian EFL learners was rejected.

#### DISCUSSION AND CONCLUSION

Statistical analysis of the hypothesis revealed that metacognitive strategies were correlated with pronunciation. In other words, the more metacognitive strategies individuals knew the better pronunciation they had.

Based on Oxford's (1990a) definition of learning strategies, pronunciation learning strategies can be taught as steps taken by students to enhance their own pronunciation learning. While there appear to be no published studies that deals with pronunciation learning strategies separately from other study (Peterson, 2000), a few investigations have looked at pronunciation as one of a number of skills associated with learning style use. O'Malley et al. (1985a) asked 70 high-school ESL students about the learning strategies they used to help them with nine different oral language tasks, one of which was pronunciation. They stated that students reported using numerous learning strategies for pronunciation. However, their results were not reported in such a way as to indicate which specific strategies may have been used for pronunciation learning.

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number of strategies involved in pronunciation learning emerged, as they did from the diary of Rivers (1979), who recorded her own experiences learning Spanish, her sixth language, during five weeks abroad. She published her diary without analysis, but several pronunciation learning strategies and tactics are seen clearly at work.

According to Oxford's (1990) strategy classification system, direct and indirect strategies, the pronunciation learning strategies and tactics that learners used in learning pronunciation were categorized and documented. Peterson (2000) later investigated Oxford's study and condensed it into 12 basic pronunciation learning strategies which provide a wider range of specific pronunciation learning tactics than had been previously documented. Learners reported they used these pronunciation learning strategies and tactics to improve their pronunciation learning. Strategies are plans or methods to obtain a specific goal and affect the overall pattern; tactics are maneuvers, details that affect particular ways to control a situation.

The present study aimed at investigating the possible relationship between the use of metacognitive strategies and pronunciation of Iranian EFL learners. For this purpose, the following research question has been proposed.

1. Is there any significant correlation between the use of metacognitive strategies and pronunciation of Iranian EFL learners?

Based on the findings of this study, it could be concluded that:

The learners who were aware of metacognitive strategies and use them beside cognitive ones in pronouncing words, have better, more easily understandable and native-like pronunciation. In other words, the more metacognitive strategies learners study, learn and utilize, the better pronunciation they have.



## References

- Avery, P., & Ehrlich, S. (1992). *Teaching American English Pronunciation*. Oxford: Oxford University Press.
- Flavell, J.H. (1985) *Cognitive Development*. London: Prentice Hall.
- Naiman, N., Frohlich, M., Stern, H., & Todesco, A. (1978). *The good language Learner*. Research in Education Series, No.7., Toronto, Ontario: Institute for Studies in Education.
- O' Malley, J.M., & Chamot, A.D. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. (1990b). Styles, strategies, and aptitude: Connections of language Learning. In T.S. Parry & C.W. Stansfield (eds.), *Language aptitude reconsidered*. Prentice Hall, Englewood Cliffs, (pp.67-125).
- Peterson, S. (2000). *Pronunciation learning strategies: A First Look*. Research Report 2000, viewed 10 August 2005, retrieved from ERIC Document Reproduction Services No. ED 450 999.
- Rivers, W. P. (1979). Learning a sixth language: An adult learner's daily diary. *Canadian Modern Language Review*, 36(1), 67-82.

Wenden (1998). Learner strategies in language learning, Prentice Hall, Englewood Cliffs, pp. 159-168.

Wenden, A. (1992). Learner strategies in language learning. Englewood Cliffs: Prentice Hall.

