Journal of English language Teaching and Learning

University of Tabriz

Volume 13, Issue 28, (Fall & Winter 2021)

Investigating the Employment of Metacognitive Strategies in Listening Comprehension among Non-Iranian Language Learners

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ARTICLE INFO:

Document Type: **Research Paper**

Received date:
2021.10.09
Accepted date:
2021.11.10

Print ISSN: **2251-7995**
Online ISSN: **2676-6876**

Keywords:

Metacognitive Strategies, Learning Strategies, Listening Comprehension, Persian Language Learner, Persian Language Teaching

Abstract

In recent years, research has indicated that metacognitive strategies play a very important role in the process of learning a second language through helping learners to become autonomous and self-directed. They are conscious processes that regulate cognitive strategies, actions, and other processes. They include planning, monitoring, and evaluating strategies. Listening skill is a complex cognitive skill, which often has an impact on the development of other language learning skills. Applying metacognitive strategies leads to better listening comprehension and optimal use of learners' other cognitive skills. The purpose of the present study is to investigate the metacognitive strategies that non-Iranian Persian learners employ to comprehend oral texts and whether gender and mother tongue have any effect on it. This research is a field study in which after calculating the item reliability of the questionnaire, data were collected quantitatively through Metacognitive Awareness Listening Questionnaire (MALQ) developed by Vandergrift, Mareschal, and Tafaghodtari (2006). One hundred nineteen adult Persian learners from eight countries participated in this study. Data analysis indicated that non-Iranian Persian learners use problem-solving, direct attention, planning-evaluation, personal knowledge, and mental translation strategies respectively. Furthermore, the findings showed that male Persian learners employ metacognitive strategies more than female learners, even though this difference was not very significant, and that mother tongue has no effect on the use of these strategies. Research findings will help Persian language teachers to take into consideration each group of learners' preferences and extent of their use, as well as variables such as gender and nationality.

DOI: 10.22034/ELT.2021.48515.2455

Citation: Vakilifard, A., Abedini, A. (2021). Investigating the Employment of Metacognitive Strategies in Listening Comprehension among Non-Iranian Language Learners. *Journal of English Language Teaching and Learning*, 13(28), 267-283. Doi: 10.22034/ELT.2021.48515.2455

Introduction

Cognition is a mental action or process of acquiring knowledge through thought, experience, and the senses. Mental activities such as perception, memory, language, reasoning, and decision-making influence cognition and guide cognitive processes. Cognition describes, acquires, stores, transforms, or consumes knowledge. However, metacognition means the knowledge beyond cognition. It is the awareness of cognition and how to actively control, regulate, evaluate, and review it. Anderson (2005) believes that metacognition is closely related to critical thinking and evaluation of one's own thought and can make certain changes in the process of learning. Metacognition is learning how to learn. Therefore, it is a very important ability in learning and monitoring the learning process, and learners should be aware of this ability and make optimal use of it in different stages of learning (Efklides, 2006).

Learners who possess better listening skills are more likely to use metacognitive listening strategies (Vandergrift, 2003). In this respect, Van Velzen (2016) also declares that "expert learners have well-organized metacognitive knowledge and spend relatively much time on the thinking through of learning tasks and the setting up of learning plans" (p. 21). The correct use of cognitive and metacognitive strategies is one of the characteristics of a self-directed language learner. These learners know where and how to use the strategies, or when using one strategy over another is more effective and efficient. In fact, they are successful and competent learners who are able to control and advance their own learning.

It can be said that the purpose of teaching metacognition is learners' self-control and self-learning, so that they eventually become autonomous learners, and be able to independently monitor and direct their learning towards certain goals and modify it if necessary. In fact, through teaching metacognitive strategies, learners learn to adopt behaviors that help them achieve what they want, or identify inappropriate strategies and replace them with appropriate ones (Callesen, 2020). In addition to setting personal goals and reflecting on their progress, an independent learner always looks for opportunities to practice outside the classroom. Overall, research shows that students who "were capable of using effective metacognitive strategies to monitor their studies of a foreign language were more likely to have academic success than students who thought they were less capable of monitoring their work" (Haukås, 2018, p. 17).

Although metacognition is one of the basic components of learning process, it has been neglected in 21st century education system. Wilson and Conyers (2016) believe that despite the importance of teaching metacognition, most teachers focus on teaching content and teaching metacognitive strategies is not yet observed in the classroom. They also state that interviews conducted with teachers have revealed limited knowledge of metacognition and how to teach it. The consequence of this is that if language learners are not taught how to employ strategies and are not aware of the potential role of these strategies in improving their language performance, they will hardly be able to progress in their learning and apply these strategies (cognitive, metacognitive, and emotional) to overcome learning obstacles. As a result, they will be less autonomous and self-directed.

In the field of Persian language teaching, the problem is that our knowledge about whether or not non-Iranian Persian learners apply learning strategies especially listening comprehension skills during their learning process, is limited. Generally, little research has been conducted on

the nature of listening comprehension strategies used among non-Iranian Persian learners and their relationship to their success (Karimi, 2014). Little is also known about the metacognitive strategies that Persian learners use to comprehend Persian oral texts. One of the possible solutions is to conduct research on Persian learners' experiences and learning activities during the process of learning Persian as a second language.

The purpose of the present study is to investigate the awareness of employing metacognitive listening strategies for learning Persian among non-Iranian Persian learners. In fact, we want to know about the metacognitive listening strategies that non-Iranian Persian learners mostly prefer. This research seeks to answer the following research questions:

1. Which metacognitive listening strategies do non-Iranian Persian learners mainly prefer?
2. Which metacognitive listening strategies do non-Iranian female Persian learners mainly prefer in comparison to male Persian learners?
3. Which metacognitive listening strategies do Arabic-speaking Persian learners mainly prefer in comparison to non-Arabic Persian learners?

Persian language teachers' awareness of metacognitive strategies that non-Iranian Persian learners use or do not use, will help to improve their teaching quality. Instructors can put more emphasis on employment of these strategies, depending on Persian language learners and their demographic variables. Furthermore, being aware of the strategies that non-Iranian Persian learners typically use, material developers can incorporate these strategies into Persian language textbooks, or in its ideal form, prepare educational content for Arabic or non-Arabic speaking Persian learners, taking into account the metacognitive strategies that each of these two groups mainly employ.

Theoretical Framework

Since metacognitive strategies are a subset of learning strategies, a brief definition of learning strategies will be provided in this section and then metacognition, metacognitive strategies, and listening comprehension will be discussed.

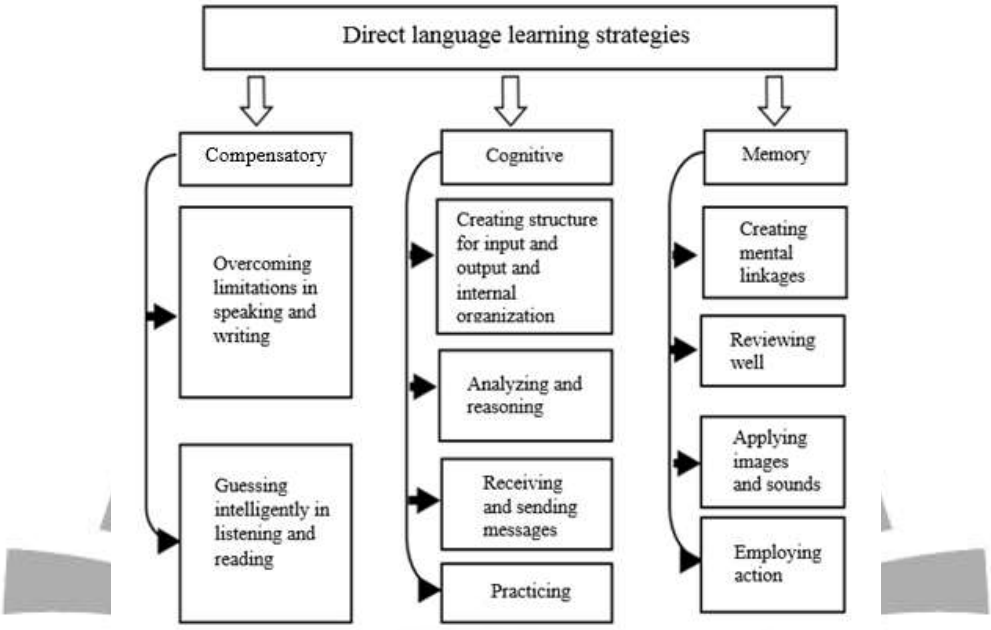
Learning Strategies

Language learning strategies are a set of actions, decisions, and behaviors that learners utilize in specific situations to improve understanding, learning, or storing new information. Learning strategies make the learning process easier, faster, more enjoyable, and more effective; and enable learners to transfer learning to new situations (Oxford, 1990). Chamot (2005, p. 112) believes that learning strategies are "most often conscious and goal-driven, especially in the beginning stages of tackling an unfamiliar language task".

Types of Learning Strategies

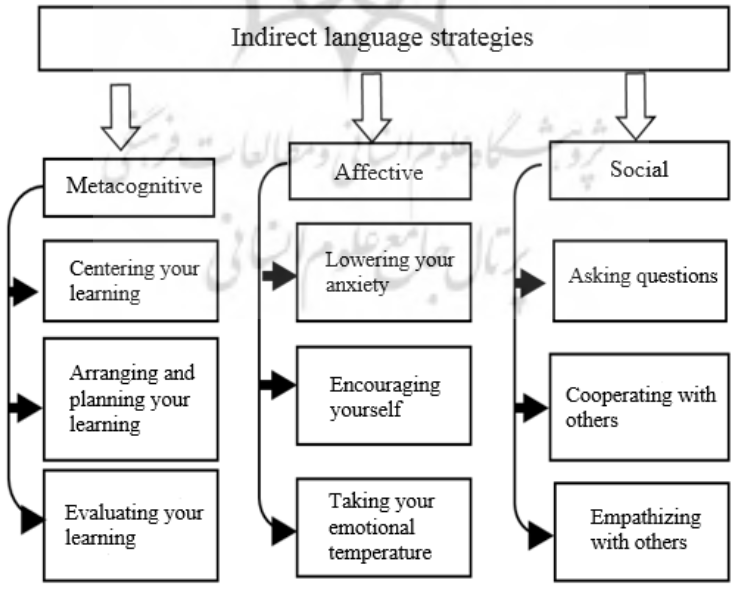
Oxford (1990) divides learning strategies into two main groups: direct and indirect. Each of them are then divided into three categories, as shown in figures 1 and 2. Direct strategies are strategies that are directly involved in learning the target language and require thinking in the target language.

Figure 1. *Direct language learning strategies*



Indirect strategies are strategies that indirectly improve language learning through focus, planning, opportunity evaluation, anxiety management, increased collaboration, understanding others, and many other activities. Direct and indirect strategies confirm each other and are interrelated. Direct strategies include memory, cognitive, and compensatory strategies (Figure 1), on the other hand, indirect strategies include metacognitive, emotional, and social strategies (Figure 2).

Figure 2. *Indirect language learning strategies*



Direct and indirect strategies are effective in all language learning situations and can be applied to all four language skills of reading, writing, speaking, and listening (Oxford, 1990). According to the model proposed by Oxford (1990), metacognitive strategies, which are the focus of this research, are a subset of the indirect strategies.

Metacognition

Metacognition has different aspects (Martinez, 2006). Higher-order processes of the mind that affect the guidance and regulation of cognitive processes are called metacognition (Zeinaly, 2010). Williams and Atkins (2009) believe that metacognition focuses on two separate but interrelated aspects: (1) knowledge/awareness of cognitive processes, and (2) control of cognitive processes. The first aspect, knowledge/awareness of one's cognitive processes, consists of two subsections: knowledge that individuals experience through cognition (theory of mind), and awareness of their cognitive processes that are related to tasks and other activities. The second aspect of metacognition can also be divided into two components: monitoring cognitive processes (knowing when they are used effectively and when not), and the ability to adjust cognition to improve its effectiveness (for example, using strategies to compensate for listening comprehension difficulties).

The ability of the learners to monitor and control their thaught when performing cognitive tasks is a complex skill that is called metacognition (Nikto, 2001). Wollfolk (2001) considers the methods employed to monitor and guide cognitive strategies as metacognitive strategies.

Metacognitive Strategies

Cognitive strategies are the processes through which learners learn the target language (e.g. identifying, grouping, preserving, and storing linguistic material) as well as its use (such as retrieving linguistic materials, practicing, understanding or producing words, phrases, and other components of the target language). On the other hand, as Cohen (2011) notes, metacognitive strategies give learners the opportunity to regulate their language learning process by planning for what they will do, tracking their progress, and then evaluating their performance on a given task.

According to Bachman and Palmer (2010), linguistic ability consists of linguistic knowledge and strategic competence. Strategic competence is considered as higher-order metacognitive strategies that undertake a managerial function when using the language. This function consists of three elements of goal setting, evaluation, and planning. From the perspective of the two researchers, metacognitive strategies determine how linguistic ability can be transformed into linguistic performance when using the language. Phakiti (2008) states that metacognitive strategies are conscious processes that regulate cognitive strategies, performances, and other processes, and include planning, monitoring, and evaluating strategies.

Employment of metacognitive strategies has a strong, positive, and direct effect on the use of cognitive strategies; however, it has no direct effect on linguistic performance. The use of cognitive strategies has a different effect on vocabulary and grammar skills, but has no direct effect on the reading skill (Purpura, 2011).

Metacognitive Strategies and Listening Comprehension

Listening skill is the most comprehensive language skill in everyday life and "a core component of second language proficiency" (Richards, 2008, p. 1). This language skill is a complex cognitive skill, which often has an impact on the development of reading and writing abilities when learning a new language (Oxford, 1990). This is because before responding orally or in written form, one receives information through listening to instructions or explanations. Moreover, listening is an essential and fundamental aspect of communicative

competence (Richards, 2008). Research in the field of second/foreign language teaching has demonstrated that due to the hidden nature of listening processes in decoding and construction of meaning from verbal and non-verbal messages, listening skill is the most difficult language skill to learn (Richards, 2008).

Listening comprehension is the process of understanding the message conveyed by the speaker, which is done through listening skills, and the better this comprehension is, the easier and faster the learning process will be. Cognitive strategies are strategies for the management of data, content, and performance of a particular skill for a particular task, and are employed in two ways: "top-down" processing and "bottom-up" processing (Holden, 2004). In bottom-up processing, the listener decodes the message. This means that he breakes the soundstream into meaningful units and gradually combines larger meaningful units, from the phonological level to the discourse level. On the other hand, in top-down processing, prior knowledge is used to create a conceptual framework for the purpose of interpretation (Vandergrift, 2011).

In listening comprehension, metacognitive strategies are related to how the listener manages, regulates, and guides learning, and they include the planning, monitoring, and evaluation that take place before, during, or after the listening process. In a research conducted by Vandergrift et al. (2006), it was found that "approximately 13 percent of variance in listening achievement could be explained by metacognition" (as cited in Vandergrift & Goh 2012, p. 23). In general, listeners who can apply the knowledge of metacognitive listening during cognitive processes, are better able to regulate these processes and efficiently use relevant knowledge resources to comprehend oral texts. These researchers believe that in order to interact with different parts of the oral texts, different strategies must work together.

Applying metacognitive strategies leads to better listening comprehension and optimal use of learners' other cognitive functions. This is because they use metacognition to control and guide their cognitive processes and reinforce them where necessary or use another strategy. These strategies enhance learners' ability since they encourage the learners to use their knowledge and make them eager to learn and take risks in new situations (Desoete & Ozsoy, 2009).

Literature Review

Language learning strategies, especially metacognitive strategies in English, French, etc. have been extensively researched. However, little research has been carried out about teaching Persian to non-Persian speakers in the domain of metacognitive listening strategies awareness. Here we refer to a body of literature about the awareness of metacognitive listening strategies for Persian and other languages.

In the only study conducted in Persian as a second language, Karimi (2014) examined the extent to which listening comprehension strategies were used among fifty nine non-Iranian girls and boys who were learning Persian at intermediate and upper-intermediate levels. Research findings indicated that in the same classes, stronger learners outperformed their weaker counterparts due to higher levels of listening ability. It was also found that although all language learners used a variety of cognitive, socio-emotional, memory, and metacognitive listening strategies, more competent learners demonstrated greater proficiency in applying the four listening strategies. However, their performance was weaker concerning the metacognitive

skills. The performance of competent learners in using strategies such as taking notes, summarizing the lectures, and understanding the key points, which are critical to academic success, were lower than aticipated.

Ismaili, Taki and Rahimian (2017) investigated the use of different metacognitive strategies by EFL students at the University of Isfahan. For this purpose, thirty six EFL students were selected out of fifty from the existing classes based on their performance in TOEFL listening comprehension section. They included 27 women and 23 men and ranged in age from 18 to 32 years. Two instruments were used: Metacognitive Awareness Listening Questionnaire (MALQ) by Vandergrift et al. (2006), and TOEFL's listening comprehension section. The results indicated that there was a statistically significant relationship between problem solving strategy and mental translation strategy. Most frequently used strategy was problem solving and the least frequently used one was mental translation. The results also implied that Iranian EFL learners have a moderate level of metacognitive strategies awareness.

With the aim of investigating the use of metacognitive listening strategies by Iranian English students at the University of Isfahan, Ratebi (2013) examined the effect of explicit teaching of metacognitive strategies on listeners with different proficiency levels. To this end, sixty first-year students of English literature and translation (23 males and 37 females), with an age range of 18-22 years, were selected based on purposive non-random sampling method. Participants answered Metacognitive Awareness Listening Questionnaire (MALQ). The mean value of the questionnaire subsections showed the highest level of metacognitive awareness for problem solving strategy and the lowest level of awareness for personal knowledge strategy.

In another research, Karimi (2014) investigated how Persian learners prioritize various cognitive, socio-emotional, memory, and metacognitive listening strategies. Unlike Karimi (2014), other researchers like Ismaili, Taki and Rahimian (2017), and Ratebi (2013), have specifically studied the employment of metacognitive strategies by EFL learners in Iran. For the first time, the present study exclusively focuses on cognitive strategies, uses Metacognitive Awareness Listening Questionnaire (MALQ) developed by Vandergrift et al. (2006), studies the different effects of variables such as gender and mother tongue, and involves more subjects in comparison to Karimi (2014).

Method

Random sampling method was employed in the present research for data collection. Questionnaires were randomly distributed among the Persian students and one hundred and nineteen samples were finally collected using valid and verifiable questionnaires.

Participants

The participants of this study consisted of 119 Persian students of the Persian Language Training Center of Imam Khomeini International University who were studying at this university from 2018 to 2019. They were from Pakistan, Lebanon, Afghanistan, Yemen, Turkey, Syria, China, and Iraq. Participants' characteristics and demographic information are presented as follows:

a. Gender: 73 (61.3%) male and 46 (38.7%) female.

b. Age: 49 students (4.2%) were under 22 years old (the highest frequency) and 2 students (1.7%) were over 33 years old (the lowest frequency).

c. Degree: 66 students (55.5%) had bachelor's degree, 32 students (26.9%) had master's degree, and 7 students (5.9%) had Ph.D. degree.

d. Mother tongue: 89 students (74.8%) were Arabic-speaking and 30 students (25.2%) were non-Arabic-speaking.

Instruments

The Metacognitive Awareness Listening Questionnaire (MALQ) developed by Vandergrift et al. (2006) was used as the research instrument. It consisted of five sections: a. planning-evaluation, b. direct attention, c. personal knowledge, d. mental translation, and e. problem solving. The total number of items were 21, from which 5 items were randomly dedicated to planning-evaluation (items 1, 10, 4, 20, and 21), 4 items to direct attention (items 2, 6, 12, and 16), 3 items to personal knowledge (items 3, 8, and 15), 3 items to mental translation (items 4, 11, and 18), and 6 items to problem solving (items 5, 7, 9, 13, 17, and 19). Each section of the questionnaire represents one metacognitive strategy.

The first section, problem solving, represents a set of strategies that listeners apply for deduction, such as using familiar words to guess the meaning of unknown words, using the general idea of a text to infer the meaning of unknown words, using experience and general knowledge for interpretation of a text, modification and correction of the interpretation if it is incorrect, monitoring the accuracy of the inferences to match the ongoing interpretation, and comparing the ongoing interpretation with personal knowledge about the subject. In fact, "problem solving is a process characterized by a complex interaction of factual knowledge, cognitive and metacognitive strategies, experiences, belief systems and social factors" (Mazorodze and Reiss, 2019, p. 2).

The second section of the questionnaire, planning-evaluation, describes the strategies that listeners use to prepare themselves for listening and evaluating the result of their listening effort. The four strategies in this section are: plan for how to listen, think about similar texts as a guide for listening, have a goal in mind as you listen, periodically investigate the degree of satisfaction about the level of comprehension, and evaluate the effectiveness of listening efforts.

The third section, mental translation, are strategies that competent listeners should learn to avoid. Strategies such as translating in your head, keyword translation, and word by word translation, are strategies that beginners feel compelled to use.

The fourth section, personal knowledge, demonstrates the listeners' perceptions about the difficulty of understanding oral texts in the second language and their self-efficacy in listening. Items of this section include strategies such as evaluating listening difficulty in comparison with the other three language skills, learners' self-confidence in listening to a second language, and their level of anxiety when listening to a second language.

Finally the fifth section, direct attention, includes strategies that listeners use to focus. The four strategies in this section are: recover concentration when losing focus, focus harder when

you have trouble understanding, get back on track when losing concentration, and don't give up when you have difficulty understanding what you hear.

Questionnaire Reliability

The concept of reliability is the extent to which measuring instruments produce the same results under the same conditions. Therefore, the reliability of the questionnaire used in this study was measured by Cronbach's alpha. In fact, Cronbach's alpha coefficient is the correlation coefficient of data at different times and its magnitude is between zero and one. A reliable questionnaire is the one with a Cronbach's alpha coefficient closer to one. Typically, if the alpha coefficient is less than 0.6, it is weak; if it is greater than 0.7, it is good; and the coefficient between 0.6 and 0.7 is acceptable. As a result, the closer the alpha coefficient to 1, the more reliable it will be. For this purpose, the 21-item questionnaire of metacognitive awareness developed by Vandergrift et al. (2006), was first translated. After being reviewed by three instructors from the International Center for Teaching Persian Language to Non-Persian Speakers, a prototype including twenty questionnaires was pre-tested. Next, using the data obtained from these questionnaires, and with the help of SPSS, the reliability coefficient was measured employing Cronbach's alpha. Table 1 indicates the Cronbach's alpha coefficient for each section of the questionnaire.

Table 1 . *Cronbach's alpha coefficient for each section of the questionnaire*

Variables	Cronbach's alpha
Planning-Evaluation	0.722
Direct Attention	0.739
Personal Knowledge	0.756
Mental Translation	0.769
Problem Solving	0.791
Total	0.805

According to the results presented in the table above, it is inferred that the reliability of all sections of the questionnaire is good ($\alpha > 0.7$).

Data Collection Method

The present study is a field research in which the data were collected quantitatively through metacognitive awareness listening questionnaire developed by Vandergrift et al. (2006).

Data Analysis

The data collected through the questionnaire were organized into statistical tables and then their mean and standard deviation were calculated. After describing the characteristics of the sample, the data were coded, classified, and summarized. Finally, SPSS statistics 22 was used for analyzing the data obtained. It should be noted that, in order to test the normality of research variables, Kolmogorov-Smirnov test; to check the status and level of research variables, one-sample t-test; to rank the components and indicators, Friedman test; and finally to compare the application of each strategy in terms of gender and mother tongue, independent t-test was employed.

Results

Table 2 presents the results of Kolmogorov-Smirnov test employed to examine the normal distribution of research variables.

Table 2. *Normality test of research variables*

Variables	Test Statistics	Sig.	Status
Planning-Evaluation	1.017	0.235	Normal
Direct Attention	0.459	0.984	Normal
Personal Knowledge	0.582	0.888	Normal
Mental Translation	0.501	0.971	Normal
Problem Solving	0.470	0.969	Normal

The First Research Question

Friedman test was employed for rating each strategy. Besides evaluation of meaningfulness, this test rates each strategy according to the mean of the ranking. Table 3 Summarizes the results of the Friedman test for rating the strategies.

Table 3. *Rating the application of strategies*

Strategies	Mean Rank
Planning-Evaluation	3.27
Direct Attention	3.60
Personal Knowledge	2.38
Mental Translation	1.87
Problem Solving	3.89
Friedman Test Results	χ^2=139.863 gis=0.001

It is observed that the test is meaningful, which means that there is a significant difference between the rating of the strategies employed for learning Persian. According to the mean value of the rating, the three strategies of "problem solving", "direct attention", and "planning-evaluation" are arranged from first to third in terms of importance and application. Table 4 presnts the results of the employment of metacognitive strategies.

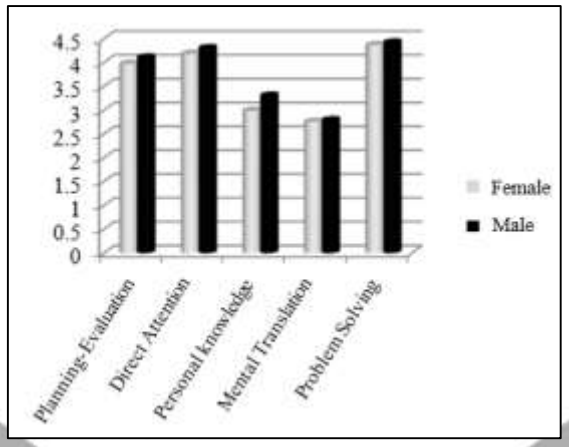
Table 4. *Assessing the application of strategies based on one-sample t-test (test criterion=3)*

Strategies	Mean	Standard Deviation	Test Statistics	Sig.	Status
Planning-Evaluation	4.055	0.919	12.518	0.001	Desirable and Significant
Direct Attention	4.258	0.963	14.251	0.001	Desirable and Significant
Personal Knowledge	3.184	1.149	1.754	0.082	Not Significant
Mental Translation	2.781	0.974	-2.445	0.992	Not Significant
Problem Solving	4.402	0.858	17.814	0.001	Desirable and Significant

The Second Research Question

Figure 3 illustrates the differences in the employment of the strategies in terms of gender.

Figure 3. *Comparison of strategies in terms of gender*

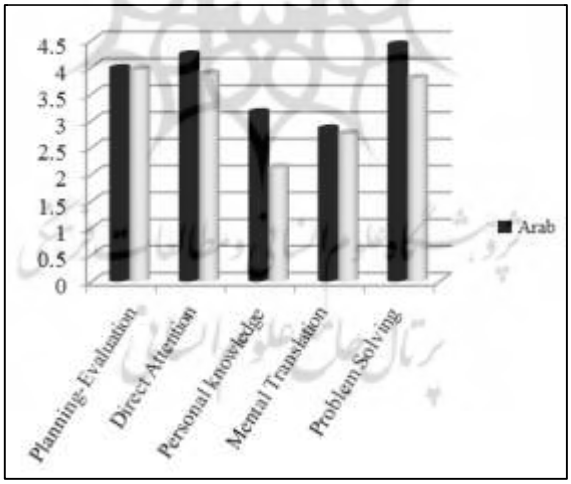


According to Figure 3, it can be seen that the mean value of the strategies does not differ significantly between males and females. This means that gender has no effect on the use of the five learning strategies.

The Third Research Question

Figure 4 shows the differences in the application of the strategies in terms of mother tongue (Arabic and non-Arabic).

Figure 4. *Comparison of strategies in terms of native language*



As can be seen, the mean value of the components of planning-evaluation, direct attention, mental translation, and problem solving strategy do not significantly differ between Arabic speakers and non-Arabic speakers. This means that mother tongue has no effect on the use of these learning strategies. However, there is a significant difference between Arabic speakers and non-Arabic speakers, and according to the mean value of Arabic-speaking Persian learners, they have applied this component more than non-Arabic speaking Persian learners.

Discussion

As was mentioned above, the metacognitive listening strategies used in the present study are: a. problem solving, b. planning-evaluation, c. mental translation, d. personal knowledge, and

e. direct attention, each of which will be seperately described and the results related to them will be presented.

The first factor, problem solving, is a set of strategies applied by listeners to guess what they do not understand and monitor these conjectures. Six out of 21 items in the questionnaire include strategies such as: 1. Using familiar words to guess the meaning of unfamiliar words; 2. Using the general idea of the text to discover unknown words; 3. Using experience and general knowledge to interpret the text; 4. Modification of the interpretation if it is incorrect; 5. Monitoring the accuracy of the inferences to match the ongoing interpretation; and 6. Comparing the ongoing interpretation with personal knowledge about the subject. The results concerning the first listening strategy, problem solving, show that: 1. Cronbach's alpha coefficient is 0.791, which indicates a good level of reliability; 2. According to the Kolmogorov-Smirnov test, the data obtained with regard to this strategy are normally distributed; 3. The application of this strategy, based on one-sample t-test, is significant and meaningful; 4. According to independent t-tests, men used this strategy a little more than women. But this difference was not significant; 5. The tables and independent t-tests indicate that mother tongue (Arabic and non-Arabic) has no effect on the use of this learning strategy, and 6. As the results of Friedman test shows, Persian learners hold the first rank in applying this strategy.

The second factor, planning-evaluation, represents the strategies that listeners use to prepare themselves for listening and evaluation of the result of their listening effort. Five out of 21 items are strategies such as: 1. Planning for how to listen; 2. Thinking about similar texts as a guide for listening; 3. Have a goal in mind while listening; 4. Periodical investigation of the degree of satisfaction with the level of comprehension of the text or the topic; and finally 6. Evaluating the effectiveness of listening efforts. These strategies demonstrate the evaluation of purpose and purposive nature of the comprehension process and whether they are understood or not. The results of planning-evaluation strategy indicate that: 1. Cronbach's alpha coefficient is 0.722, showing a good and acceptable reliability level; 2. Kolmogorov-Smirnov test shows that the data obtained about this strategy are normally distributed; 3. The result of one-sample t-test about the application of this strategy is significant and meaningful; 4. Independent t-tests indicate that men used this strategy a little more than women. But this difference was not significant as well; 5. According to the tables and independent t-tests, mother tongue (Arabic and non-Arabic) has no effect on the use of this learning strategy, and finally 6. As the results of Friedman test shows, non-Iranian Persian learners hold the third rank in applying this strategy.

The third factor, mental translation, is also a set of strategies that learners must learn to avoid, so as to become competent listeners. All three items representing this strategy are inefficient approaches to listening comprehension: 1. Word by word translation; 2. Translating in your head; and 3. Translation of keywords while listening. Most beginner listeners feel compelled to use mental translation, but they must avoid using them if they want to become a competent listener. The findings of the third section, that is, mental translation are as follows: 1. Cronbach's alpha coefficient is 0.769, so it can be said that the level of reliability is good and acceptable; 2. According to the Kolmogorov-Smirnov test, the data obtained with regard

to this strategy are normally distributed; 3. The result of one-sample t-test about the application of this strategy is not significant; 4. Independent t-tests indicate that men used this strategy a little more than women. Yet the difference was not significant; 5. The results obtained from independent t-tests demonstrate that mother tongue (Arabic and non-Arabic) has no effect on the employment of this learning strategy; and 6. According to Friedman test, learners from the International Center for Teaching Persian Language to Non-Persian Speakers, hold the fifth rank in the employment of this strategy.

The fourth factor, personal knowledge, shows the listeners' perceptions about the difficulties encountered when listening to second language oral texts and their self-efficacy in listening. Three questions include items to assess listeners' perceptual problems (learners' confidence in listening to second language oral texts and their level of anxiety at the time of listening) in comparison to other three language skills. They include: 1. Feeling that listening skill is more difficult than the other three skills; 2. Feeling that listening skill is challenging; and 3. Feeling anxious and worried about listening to a second language speech. The results demonstrate that: 1. Cronbach's alpha coefficient (0.756) reperesents a good and acceptable reliability level; 2. The data obtained are normally distributed; 3. The results of one-sample t-test are not significant and meaningful; 4. Independent t-tests show that men used this strategy a little more than women, but this difference was not significant; 5. There is a significant difference between Arabic-speaking and non-Arabic-speaking learners and according to the mean values, Arabic-speaking Persian learners applied this component more than non-Arabic-speaking learners; and 6. Persian language learners hold the forth rank in using this strategy.

The fifth factor, direct attention, represents the strategies that listeners use to focus. This section consists of four items: 1. Recover concentration when losing focus; 2. Focus harder when you have trouble understanding; 3. Get back on track when losing concentration; and 4. Not to give up when you have difficulty understanding what you hear. All these strategies play an important role in focusing attention during the process of listening. Competent listeners, along with regulating other metacognitive processes, are able to focus and concentrate on the input information and their own thoughts, despite the difficulties. The findings indicate that: 1. The reliability level is good and acceptable (0.739); 2. The data are normally distributed; 3. The results of one-sample t-test are significant and meaningful; 4. Men used this strategy a little more than women; But again this difference was not significant; 5. Mother tongue (Arabic and non-Arabic) has no effect on the use of this strategy; and finally 6. Persian learners hold the second rank in using this strategy.

Overall, the results obtained indicated that the order of applying metacognitive listening strategies for learning Persian as a second language among non-Iranian Persian learners are: a. Problem solving; b. Direct attention; c. Planning-evaluation; d. Personal knowledge; and e. Mental translation. In the present study, the highest level of metacognitive awareness and learners' performance belongs to the problem solving strategy and the lowest level is for mental translation. Strategies of direct attention, planning-evaluation, and personal knowledge are also at a good level of application. The findings of this study are consistent with the results obtained from the research conducted by Esmaeili, Taki, and Rahimian (2017); however, direct attention and planning-evaluation strategy have an inverse position in their study. In general, the results

do not agree with the results of Karimi's (2014) research, which showed that non-Iranian Persian learners do not appropriately apply metacognitive strategies. In these studies, problem solving strategy holds the first position as well, but the position of personal knowledge and mental translation have been reversed. It should be noted that the results of this study are in line with Ratebi (2013) merely with regard to the use of problem solving strategy. Therefore, the findings of the present study and other studies indicate that awareness and application of metacognitive listening strategies improve and enhance learning, even though in some cases they are applied differently. The findings also demonstrate that most learners are familiar with the problem solving strategy and employ it more than other strategies.

Conclusion and Implications

Metacognition is planning, monitoring, directing and guiding cognitive processes in order to achieve one's goal, and these processes are constantly evaluated. Cognitive and metacognitive strategies play a very crucial and fundamental role in learning a second or foreign language. Awareness of these strategies can lead language learners towards achieving their goal and give them motivation, power, knowledge, and ability to plan and supervise their learning and turn into hardworking, knowledgeable, and autonomous learners, that is, to know how, when, and where to use their cognitive and metacognitive knowledge. Therefore, learning strategies, especially issues related to cognition and metacognition, metacognitive strategies, and other issues about learning should become institutionalized in educational macro-planning so that everyone can benefit from the consequences. The purpose of awareness, teaching, and application of metacognitive strategies is self-control and autonomy, which make learners become independent and be able to plan, guide, monitor, improve, and evaluate their learning in order to achieve specific goals. Most learning and learning trasmission difficulties are due to the lack of awareness about these skills. Metacognitive strategies lead to the optimal use, management, and evaluation of cognitive processes. It is necessary for both teachers and learners to be aware of them and receive the required education.

As stated above, metacognitive strategies reflect thinking about one's own thoughts, the level of individual consciousness, and the level of control over one's mental process. It is quite clear that the introduction and recognition of metacognitive strategies are very important in learning Persian and language teachers can choose a strategy which is more practical and useful, and is in accordance with language learners' educational background. Based on the results of previous research and the present study, it can be concluded that learners use metacognitive learning strategies either willingly or unwillingly. However, it is clear that if these strategies are specifically introduced to them, they will be more successful. For instance, in this study it was found that the problem solving strategy holds the first place. But have Persian language teachers really used this strategy more while teaching or have the learners learned this skill themselves while acquiring their mother tongue? Nevertheless, it was found that non-Iranian Persian learners have sufficiently employed metacognitive listening strategies, and if we provide appropriate conditions for the introduction of metacognitive strategies to teachers and learners, the learning process and their approach toward autonomy will be easier, more systematic, enjoyable, effective, and faster.

Based on the results, it seems that teachers teaching Persian to non-Iranian learners need to emphasize the metacognitive strategies of each language group. This means that, they should focus on the strategies they employ and explicitly teach unfamiliar metacognitive strategies. In this way, they need to emphasize the metacognitive base of self-regulation and self-monitoring, and use explicit explanations and role modeling to teach and confirm them. Undoubtedly, more metacognitive awareness will eventually improve their listening comprehension skill. As Wilson and Connery (2016') emphasize, the purpose of teaching metacognitive strategies to learners is "to guide them to consciously, and with increasing independence, recognize when and how to employ cognitive strategies that work best for them across various situations" (p. 9).

Suggestions for Further Research

It seems that besides this research, further research should be carried out investigating more samples. It is required that Persian language classes for foreigners to be observed and evaluated so as to know whether metacognitive strategies are taught clearly and explicitly in the classrooms. Finally, it is also important to investigate whether Persian learners who have internalized metacognative strategies, are more able to use their abilities to achieve higher proficiency levels in comparison to those who have not learned them.

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