Journal of Studies in Learning and Teaching English Vol. 2, No. 6, (2014), 125-148

The Relationship Between Learning Strategies Employed by EFL Learners and their Preferences for Assessment Techniques

Fatemeh Shekari*

Department of Foreign Languages, Islamic Azad University, Shiraz Branch, Shiraz, Iran

Ehsan Rassaei

Department of Foreign Languages, Islamic Azad University, Shiraz Branch, Shiraz, Iran

Abstract. The purpose of the current study was to reveal the in-depth relationships between cognitive and meta-cognitive learning strategies that are used by EFL learners and their preferences for different assessment techniques. To do so, two revised questionnaires were involved: Strategy Inventory for Language Learning (SILL) and Assessment Preference Inventory (API). In addition, more than 100 participants, both male and female, from two English institutes in Shiraz and EFL learners from several foreign countries took part in this study. After collecting data, the chi square analysis was run through SPSS software. Data analysis indicated that there were statistically significant relationships between these two variables, namely cognitive and meta-cognitive strategies used by EFL learners and their preferences for different assessment techniques. Given the results, it needs to be acknowledged that the relationship of cognitive and meta-cognitive strategies among EFL learners and their preferences for different assessment techniques could have been far more complicated than what has been found or implied. The

Received: August 2014; Accepted: September 2014

^{*}Corresponding author

implications for EFL learners and language teachers are discussed in the present study.

Keywords: Learning strategies, assessment techniques, EFL preferences for assessment techniques.

1. Introduction

Research efforts in second or foreign language instructions have over the past thirty years shifted from an emphasis on the role of the teachers to that of the learners. Many teaching methods and approaches have been explored and implemented in recent years to enhance the effectiveness of FL/SL education programs. Learner-centered approaches had become the current trend and are gradually replacing the traditional EFL teaching approaches. Learner-centered education focuses on maximizing learners' needs for meaningful communicative opportunities in students' second language (L2) or foreign language (FL), promoting learners' active engagement in the classroom, and emphasizing learners' primary differences in the learning processes.

Therefore, learning strategies, which are among the most important individual differences, should be taken into account. According to Cohen(1999), learning strategies refer to "processes consciously chosen by students that result in action taken to enhance the learning or use of a second language" (p. 4). One aim of investigating such strategies is to gain insights into the cognitive, meta-cognitive, and affective processes involved in language learning and through this to help students who are having difficulties become better language learners (Chamot, 2001). Research into strategies is also important because they are readily teachable (Oxford and Nyikos, 1989; Chamot, 2001).

These studies also supported the notion that the use of appropriate learning strategies enables students to take responsibility for their own learning by enhancing learner autonomy, independence, and self-direction (Oxford and Nyikos, 1989). In this regard, it appears to be extremely important that teachers of a second or a foreign language learn to identify and comprehend how the strategies of their students are applied in various language activities. On the other hand, assessing students' attainment has in recent years been received a great amount

of attention for their teachers, parents, educational professionals and in education systems, which can reveal the progress of students' language learning.

Nowadays, studies have shown that students' learning strategies and assessment preferences are two important factors affecting their success. Although it is important to consider students' learning strategies and their preferences for assessment techniques, this complicated relationship between learning strategies employed by EFL learners and their preferences for assessment techniques is not well understood. Due to the fact that learning and assessment are two important aspects of education that are tightly related, it is important to know how testing techniques are related to learning strategies used by EFL learners. However, no previous study in this field of language learning has addressed this issue before.

Defining these relationships between learning strategies and assessment preferences will guide teachers for constructing learning area more effectively. Knowing the relationship between these differences will help the teachers to assess students taking into account their individual differences on the one hand and shape the learning environment depending on those differences on the other hand.

2. Literature Review

This section provides a brief review of the literature in two parts. The first part discusses language-learning strategies (LLSs) in various contexts, Oxford model of learning strategies, and a variety of factors related to the use of strategies by language learners. In the second part, the definition of assessment will be presented, followed by its background. Since teachers and applied linguists make use of different assessment techniques, these different assessment techniques needs to be stated.

2.1 Language learning strategies (LLS)

Language learning strategies are defined as specific methods or techniques used by individual learners to facilitate the comprehension, retention, retrieval and application of information for language learning

and acquisition (Oxford, 1990). Language-learning strategies are steps taken by students to enhance their own language learning.

Oxford (1990) provides one of the most comprehensive definitions, as follows:

Language learning strategies are operations employed by the learner to aid the acquisition, storage, retrieval, and use of information; specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (p. 8).

In Oxford's (1990) definition, several student-intended goals are evident. These are related to aspects of learning and use of information, as well as to the changed nature of learning when learning is enhanced by strategies (easier, faster, . . more self-directed . .). A more detailed explanation of language learning strategies indicates that these strategies are specific methods or techniques consciously used by individual learners to facilitate language learning and acquisition (Oxford, 1990). In our field, virtually, all definitions of strategies imply conscious movement toward a language goal (Bialystok, 1990; Oxford, 1990, 1996a).

Research has shown that strategies can be taught and when applied do improve achievement levels (O'Malley et al., 1985; Oxford, 1986). Because the learner's self-selection of learning strategies often involves unconscious processes that cannot be objectively measured, there is little overall consensus as to the role of learning strategies in second language acquisition or as to the relationships that exist among identified strategies (O'Malley et al., 1985).

Recent research on language learning strategies has witnessed prolific and vigorous growth in the past few decades in both second and foreign language contexts. Numerous studies around the globe have heightened the world's awareness of language learning strategy use and of factors affecting learners' strategy choice. In an investigation by Nunan (1991), he stated that learners that are more effective differed from less effective learners in their greater ability to reflect on and articulate their own language learning processes. In a study of learners of English in Puerto Rico, students that are more successful used strategies for active

involvement more frequently than did less successful learners, according to Green and Oxford (1995).

Chamot et al. (1996), Cohen et al. (1995), investigated the effects of strategy instruction among native-English-speaking learners of foreign languages and found some positive results mixed with neutral findings. In other studies, strategy instruction led to increased EFL learning motivation (Nunan, 1997) and, among native-English-speaking learners of foreign languages, greater strategy use, and self-efficacy (Chamot et al., 1996). Ehrman and Oxford (1995) studied 262 English native-speaker government employees studying different foreign languages at the U.S. Foreign Service Institute.

They found that the most frequently used strategies were from the compensation category followed by social and cognitive, then metacognitive, memory and affective strategies. Only compensation strategies were associated (weakly) with proficiency. However, they did not report on gender or give separate results for individual strategies. Rong (1999) investigated language learning strategy use among tertiary-level students in China and reports that compensation and meta-cognitive strategies were the most frequently used; memory and cognitive were used least. Frequency of strategy use was higher among learners that are more proficient. Finally, not enough seems to be known about why students use or do not use certain strategies.

It is suggested it is important to investigate the factors affecting student use of strategies so as to ensure greater success when teachers provide learning strategy training to students. However, research in certain areas is lacking. There appear to be almost no studies investigating age as a factor. In addition, most previous research (with the notable exception of Green and Oxford, 1995) is confined to describing the broad categories of strategies that students use rather than individual strategies.

2.1.1 Oxford's classification of learning strategies

Oxford (1990) classified language learning strategies into direct strategies (memory, cognitive, and compensation), and indirect strategies (meta-cognitive, affective, and social). Oxford's model has been used

by researchers and teachers around the world. Her Strategy Inventory for Language Learning (1990), based on this model, has been translated into 23 languages, and used in more than 200 dissertations and theses.

Oxford outlined direct strategies as follows:

- (1) Memory-related strategies, also known as mnemonics, help learners link one L2 item or concept with another but do not necessarily involve deep understanding. Memory strategies are divided into four sets: Creating mental images, applying images and sounds, reviewing well, and employing actions.
- (2) Cognitive strategies enable the learner to manipulate the language material in direct ways, e.g., through reasoning, analysis, note-taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and practicing structures and sounds formally. Cognitive strategies, which may vary from repeating to analyzing expressions to summarizing, have a unified function, namely to manipulate or transform the target language by the learner. Cognitive strategies fall into four sets: Practicing, receiving, and sending messages, analyzing and reasoning, and creating structure for input and output.
- (3) Compensatory strategies (e.g., guessing from the context in listening and reading; using synonyms and "talking around" the missing word to aid speaking and writing; and strictly for speaking, using gestures or pause words) help the learner make up for missing knowledge. Compensation strategies allow learners to use the target language for either comprehension or production despite their inadequate knowledge of grammar and vocabulary. Compensation strategies are grouped into two sets: Guessing in Listening and Reading, also known as "inference," and overcoming limitations in Speaking and Writing

While indirect strategies were outlined as follows:

(1) Meta-cognitive, which means 20 beyond or with cognitive, provides learners with ways to coordinate their learning. Meta-cognitive strategies are clustered into three sets: centering your learning, planning your learning, and evaluating your learning. Meta-cognitive strategies

(e.g., identifying one's own learning style preferences and needs, planning for an L2/EFL task, gathering and organizing materials, arranging a study space and a schedule, monitoring mistakes, and evaluating task success, and evaluating the success of any type of learning strategy) are employed for managing the learning process overall.

- (2) The affective field, which is extremely hard to describe, refers to emotions, attitudes, and motivations. Affective strategies include three sets: lowering your anxiety, encouraging yourself, and taking your emotional temperature.
- (3) Language is a communication that occurs between and among people. Thus learning a language involves other people, and appropriate strategies are necessary in this learning process. Social strategies (e.g., asking questions to get verification, asking for clarification of a confusing point, asking for help in doing a language task, talking with a native-speaking conversation partner, and exploring cultural and social norms) help the learner work with others and understand the target culture as well as the language. In this study, just cognitive and meta-cognitive strategies were used.

2.2 Assessment techniques

Assessment is any act of interpreting information about student's performance, collected through any of a multitude of means. The literature on learning and teaching largely suggests that assessment is at the heart of the student experience (Brown & Knight, 1994) and that it is "an ongoing process" (Brown, 2004, p. 4). It is generally acknowledged that assessment plays a crucial role in the learning process and, accordingly, on the impact of new teaching methods (Brown et al., 1994). The importance of assessment in influencing students' approaches to their learning has been well documented by many researchers. Briefly, assessment has been found to shape how much, how (their approach), and what (the content) students learn. It seems that most students will learn the forms of knowledge and develop the cognitive abilities that they are asked to demonstrate.

Review of the empirical literature on students' conceptions of the purposes of assessment has identified four major purposes, some of which can be matched to teachers' conceptions of assessment. Students are reported as conceiving the assessment as a) Improving achievement, b) A means for making them accountable, c) Being irrelevant, and d) Being enjoyable. Language testing (LT) research has tended to concern itself with providing a model of language ability. Its primary aims are to not only describe and assess the language ability of an individual, but also to construct an extensive theory of language test performance that describes and explains test performance variation and the correspondence between test performance and non-test language use.

In the past twenty years, advances in the technology of test design and development, along with the availability and use of ever more sophisticated computer- and web-based applications for test administration, scoring and analysis, have resulted in a greater range of test formats and assessment procedures than has ever been available. There are two major uses of test results. First, the collected information is essential to effective education for making decisions about the educational program. Second, it is possible to improve learning and teaching through appropriate changes based on the feedback.

Considering the nature and varieties of language tests, they should be used in the most appropriate form, which would correspond to the nature of the attribute to be measured. Five assessment techniques which were investigated in this research are:

- 1) Open- ended questions requiring short answers or long answers (essays)
- 2) Complex and challenging tasks having more than one possible answer.
- 3) Oral tests in form of group discussion in which the instructor observes and assesses the contribution of each of the participants.
 - 4) Questions that require personal explanation and opinion.
 - 5) Questions requiring problem solving

Reviewing the vast investigations which have been taken place, it can be concluded that most of the studies that did investigate this issue did not relate it to students' personal characteristics. This is even more surprising in the view of the fact, that studies regarding the effect on performance of the interaction between assessment format and personal characteristics yielded significant results. The present study extended these types of investigations and examined the EFL learners' language strategies and their preferences for assessment techniques.

3. Research Questions

This study tried to shed light on these three questions:

- 1) Is there any statistically significant relationship between learning strategies employed by EFL learners and their preferences for assessment techniques?
- 2) Which assessment techniques were more preferred by learners who used cognitive strategies?
- 3) Which assessment techniques were more preferred by learners who used meta-cognitive strategies?

4. Methodology

4.1 Participants

Participants of this study were selected based on a convenience sampling.100 learners participated in this study but just 30 of the initial participants were removed since they chose the "unsure" item in the questionnaires. All participants were EFL learners and both genders (male and female) were involved in this study. They were all adults at different ages (18 and higher) who were studying English in two different language institutes in Shiraz, Iran. In addition, EFL learners from several foreign countries who are studying English in those countries.

For those who are studying English in the two institutes in Shiraz, the questionnaires were distributed to them in a class time after giving some information about the unknown materials. In addition, for those who are studying English abroad, the questionnaires with necessary explanations were sent to them through email. Both groups were assured that their personal information would be kept confidential and they were free if they did not like to participate.

4.2 Instruments

Two types of paper and pencil questionnaire were employed in this study, namely Assessment Preferences Inventory (API) (see Appendix A) and Strategy Inventory for Language Learning (SILL) (see Appendix B).

4.2.1 Assessment preferences inventory (API)

The API (Birenbaum, 1994) is a 5-point Likert-type questionnaire containing items referring to three content dimensions: assessment form-related dimensions, examinee-related dimensions, and grading and recording. These dimensions were identified on the basis of a 22-facet mapping sentence describing the assessment domain, which included elements of traditional, as well as alternative assessment praxis. In this study, just form-related dimension was used.

Each item was rated on a 5-point scale indicating the extent to which the student would like to be assessed in that manner, where 1 indicated "to a very small extent" and 5 "to a very large extent". For the purposes of this study, a revised version was used which included 16 assessment techniques and learners were asked to answer the items of this questionnaire.

In order to indicate learners' preferences for assessment techniques, the 5-point Likert Scale was collapsed into a 3-point Scale. Learners who chose 4 or 5 were considered as those who preferred a specific assessment technique, those who chose 1 or 2 were regarded as those who did not prefer the assessment techniques while those who selected 3 were discarded from the study.

4.2.2 The strategy inventory for language learning (SILL)

The SILL (Oxford, 1986-1990) was first designed as an instrument for assessing the frequency of use of language learning strategies by students at the Defense Language Institute Foreign Language Center in Monterey, California. The SILL uses a choice of five Likert-scale responses for each strategy described: never or almost never true of me, generally not true of me, somewhat true of me, generally true of me, and always or almost always true of meta-cognitive. This study dealt only with revised and short form of the questionnaire since only two learning strategies out of six namely cognitive and meta-cognitive were considered. The original

questionnaire includes:

- 1. Memory strategies, such as grouping, imagery, rhyming, and structured reviewing (9 items).
- 2. Cognitive strategies, such as reasoning, analyzing, summarizing (all reflective of deep processing), as well as general practicing (14 items).
- 3. Compensation strategies (to compensate for limited knowledge), such as guessing meanings from the context in reading and listening and using synonyms and gestures to convey meaning when the precise expression is not known (6 items).
- 4. Meta-cognitive strategies, such as paying attention, consciously searching for practice opportunities, planning for language tasks, self-evaluating one's progress, and monitoring errors (9 items).
- 5. Affective (emotional, motivation-related) strategies, such as anxiety reduction, self-encouragement, and self-reward (6 items).
- 6. Social strategies, such as asking questions, cooperating with native speakers of the language, and becoming culturally aware (6 items).

Since in this research, the researcher considered two dimensions of language learning strategies namely cognitive and meta-cognitive, the learners were asked to answer just these two categories. Oxford (1996) noted that reliability "is determined with the whole instrument because the six categories are strongly correlated with the SILL mean (0.66-0.81) and moderately correlated with each other (0.35-0.61)" (p. 29). A Cronbach's calculated for this study also revealed an acceptable reliability (0.89).

4.3 Procedures

The participants were given a brief oral instruction on how to deal with the questionnaires in an appropriate way. They completed the Strategy Inventory for Language Learning (SILL) and Assessment Preferences Inventory (API) in class in 45 minutes under the supervision of the regular class instructors under conditions of anonymity and confidentiality. The full descriptive instructions regarding the procedures of administration were provided to and discussed with the instructor of the classes before the administration.

Furthermore, for many of those who were not able to attend the class,

the two types of questionnaires (SILL & API) were sent to complete. The students were told that there were no right or wrong answers to any question and that their confidentiality was secured and their response would be used for research purposes only. They were also informed that while their participation would not affect their grades, they still had the option not to participate. All students chose to fill out the surveys. With regard to the SILL, students who scored higher in the cognitive part of the questionnaire were classified as cognitive while those who scored higher in the meta-cognitive part of the questionnaire were considered as meta-cognitive.

4.4 Data analysis

To analyze the data, a number of Chi square analysis were employed to investigate the relationships between learning strategies employed by EFL learners and their preferences for assessment techniques.

5. Results and Discussions

The current study examined the relationship between learners' preferences for 5 assessment techniques and the learning strategies they employed. Out of 5 assessment techniques investigated, all indicated significant relationship with learning strategies employed by participants. Thus, given the results obtained from Chi square analysis, it can be concluded that there is a statistically significant relationship between EFL learners' learning strategies and their preferences for assessment techniques.

5.1 Chi square analysis

5.1.1 Learning strategies vs. preferences for open-ended questions

The Chi square analyses revealed the relationship between learning strategies (cognitive and meta-cognitive) and EFL learners' preferences for open-ended questions. The relationship between these two variables was statistically significant, $x^2(1,70) = 4,87, p < 0,05$.

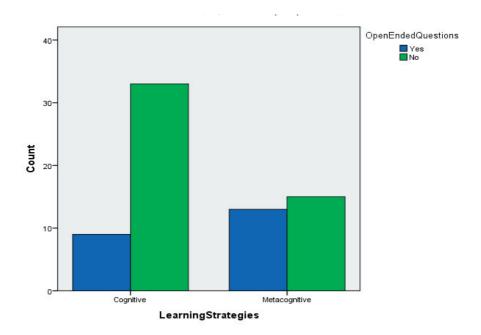


Figure 5.1.1 The relationship between learning strategies and EFL learners' preferences about open-ended questions.

As Figure 5.1.1 shows most cognitive learners, (more than 35) preferred not to be assessed by open-ended questions in either forms, short answer or essay type, compared to meta-cognitive learners. However, the most significant point here is that the number of learners who did not prefer such exam questions (42 learners) is sharply more than those preferred open-ended questions. It can be concluded that there is a negative relationship between using cognitive strategies and preferring open-ended questions.

5.1.2 Learning strategies vs. preferences for oral tests in form of group discussion

According to the chi square analysis results and as shown in Figure 4.4., it can be inferred that the relationship between the two variables, language learning strategies and oral tests in form of group discussion, is statistically significant, $x^2(1,70) = 22,27, p < 0,001$.

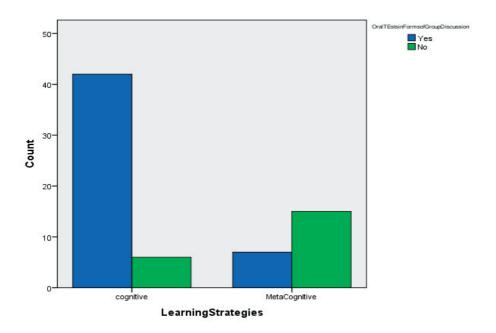


Figure 5.1.2 The relationship between learning strategies and EFL learners' preferences about oral tests in form of group discussion.

similar vein, most EFL learners who employed cognitive strategies were more eager to be assessed by oral tests in form of group discussions where the instructor observes and assesses the contribution of each of the participants compared to meta-cognitive learners were.

5.1.3 Learning strategies vs. preferences for challenging and complex tasks

Looking closely at Figure 5.1.3, the results expressed that learners who used cognitive strategies were strongly in favor of using challenging and complex tasks having more than one possible answer. The chi square analysis also indicated that there exists a statistically significant relationship between these two variables, $x^2(1,70) = 12,88, p < 0,001$.

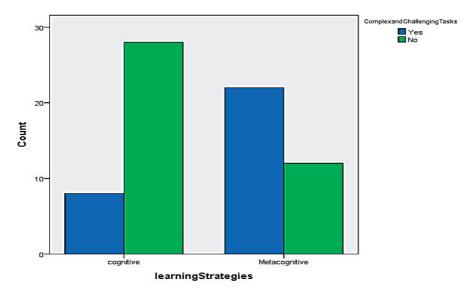


Figure 5.1.3 The relationship between learning strategies and EFL learners' preferences about complex and challenging tasks.

As the figure indicates, meta-cognitive learners welcomed challenging and complex tasks more than cognitive learners did since most meta-cognitive learners chose these types of questions compared to cognitive learners.

5.1.4 Learning strategies vs. preferences for questions require personal explanations

Employing the chi square analysis, it can be noted that there is a statistically significant relationship between these two variables, $x^2(1,70) = 16,02, p < 0,001$.

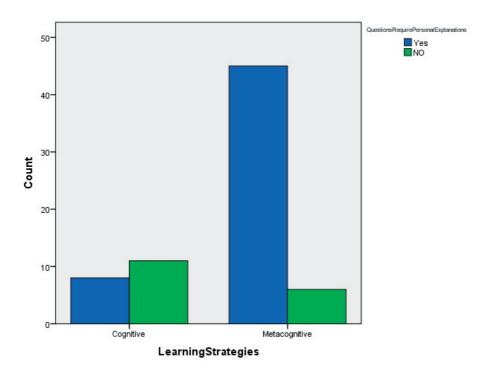


Figure 5.1.4 The relationship between learning strategies and EFL learners' preferences for questions requiring personal explanations.

Furthermore, it was not unexpected that EFL learners who used metacognitive strategies were more willing to be assessed in their exams by questions that require their personal explanations (more than 42) compared to those who used cognitive strategies (less than 10).

5.1.5 Learning strategies vs. preferences for questions require problem solving

For finding the relationship between learning strategies (cognitive and meta-cognitive) and EFL learners' preferences for questions require problem solving the chi square analysis was used. The results show a statistically significant relationship between these variables, $x^2(1,70) = 15,40, p < 0,001$.

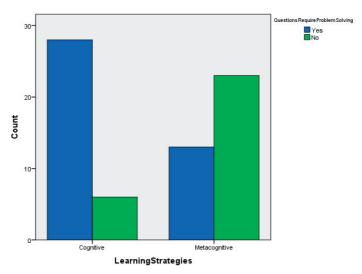


Figure 5.1.5. The relationship between learning strategies and preferences for questions require problem solving

According to Figure 5.1.5., more than 25 learners who used cognitive strategies were interested in exams in which they had to go through problem solving questions compared to less than 15 learners who used meta-cognitive strategies.

The present study aimed at gaining more insight in to the relationship between learning strategies employed by EFL learners and their preferences for assessment techniques. This study was motivated from the assumption that variability in learners' preferences for assessment techniques can be attributed to different learning strategies used by learners, which have been neglected so far. In order to shed light on these astonishing findings three research questions were posed.

Research question 1: Is there any statistically significant relationship between learning strategies employed by EFL learners and their preferences for assessment techniques?

According to the results presented in Table 1, learners who sought cognitive strategies preferred oral tests in form of group discussions (42 participants), and questions require problem solving (28 participants). Moreover, learners who sought meta-cognitive strategies preferred to be assessed by questions which require evaluation of others'

opinion (30 participants) and questions require personal explanations.

Table 1: The relationship between learning strategies employed by EFL learners and their preferences for assessment techniques

| Assessment techniques | EFL learners who used cognitive strategies | | EFL learners who used meta-cognitive strategies | |
|---|--|----------------|---|----------------|
| | Preferred | Did not prefer | Preferred | Did not prefer |
| Open –ended questions | 9 | 33 | 13 | 15 |
| Oral tests in form of group discussion | 42 | 6 | 7 | 15 |
| Challenging and complex tasks | 8 | 28 | 22 | 12 |
| Questions to evaluate others' opinion | 11 | 20 | 30 | 9 |
| Questions require personal explanations | 8 | 11 | 45 | 6 |
| Questions require problem solving | 28 | 6 | 13 | 23 |

Research question 2: Which assessment techniques were more preferred by learners who used cognitive strategies?

As mentioned earlier, cognitive strategies enable learners to manipulate the language materials in direct ways, e.g., through reasoning, analysis, note-taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and practicing structures and sounds formally(Oxford, 1999). According to the results presented in the earlier in Table 1. learners who sought cognitive strategies preferred oral tests in form of group discussions since 42 learners (most learners) chose oral tests as their most favorite assessment technique.

Research question 3: Which assessment techniques were more preferred by learners who used meta-cognitive strategies?

As was mentioned before, meta-cognitive strategies (e.g., identifying one's own learning strategies' preferences and needs, planning for an L2 task, gathering and organizing materials, arranging a study space and a schedule, monitoring mistakes, and evaluating task success, and evaluating the success of any type of learning strategy) are employed for managing the learning process overall.

Chamot and O'Malley (1990) strengthen the importance of role of meta-cognitive strategies when they stated, "students without metacognitive strategies are essentially learners without direction or opportunity to plan their learning, monitoring their progress, or review their accomplishments and future learning directions" (p. 8). The most consistent and significant relationships were evidenced between EFL learners who used meta-cognitive strategies and their preferences for questions that required to evaluate others' opinions, and personal explanations.

6. Conclusion and Implications

The last ten years have seen a growth of interest in exploring alternative assessment techniques in EFL classrooms. This interest has led to the development of many assessment methodologies, which teachers or assessors can use to elicit and assess students' performance. If the evaluations are only based on one type of assessment format (e.g., if rely only on performance tasks), it is likely to have an incomplete picture of each student learning.

There are many variables that can put validation of a test results under the question. One of these variables is the learning strategies that are consciously or unconsciously used by learners. This research interest involves attending to the two learning strategies-namely cognitive and meta-cognitive-which respondents were drawing upon as they completed the questionnaire about their preferences for various assessment techniques.

There is, however, a debate as to why some assessment techniques are favored more than the others are, and therefore by extension, what relationships exist between assessment preferences and learning strategies (cognitive and meta-cognitive) of EFL learners. The primary purpose of conducting this study was to arrive at series of empirically validated conclusions for such controversies in order to enhance EFL learners' learning.

Given the results, it needs to be acknowledged that the relationship of cognitive and meta-cognitive strategies to EFL learners and their preferences for different assessment techniques could have been far more complicated than what has been found or implied. Accordingly, caution needs to be taken in an attempt to discuss and generalize the findings. This study tried to explain the relationship between EFL learners' preferences for different assessment techniques and their learning strategies use. This study was motivated from the assumption that the variability in language test performance can be attributed to test-taker characteristics (Bachman, 1990). Evidence from the present study proved that there are statistically significant relationships between these two variables, which have been ignored so far. The findings of this study were in line with some other researches.

Regarding the students' preferences for assessment techniques, the followings can be concluded. First, students who used cognitive strategies preferred oral tests, and questions that require solving problems the most. It can be stated that these learners can use the materials they learnt easily in that they are better in applying them rather than generating new materials. They prefer to apply, realize, and analyze their learnt materials even in new conditions but not memorizing them. Second is about learners who used meta-cognitive strategies. They preferred questions, which asked them to evaluate others' opinion, as well as questions that required personal explanations. It can be expressed that these learners are in favor of memorizing important materials. These learners perceived the assessment more as memorization of materials than applying them. Doing so, they try to get their desirable grades by remembering them.

To conclude, it is hoped that the present study has not only helped make a contribution to a theory of cognitive and meta-cognitive strategies use and preferences for various assessment techniques, but has also offered some possible ways to look at some theoretical and methodological perspectives about these two important issues. To put it in a nutshell, to improve the quality of the learning, quality of assessment should be increased as well.

The findings of this study can bring several implications to instructional practice for teacher educators in the classrooms. It is important to conceptualize the relationship between the learning strategies' of learners and their preferences for assessment techniques since these two are still unknown to many language teachers.

The first implication is for teacher educators. They need to be in-

formed about these complex and important relationships and to advocate the values of strategy instructions in English teaching and learning as well as in different assessment techniques.

Second, policymakers should pay close attention to the relationship between learning strategies of learners and their preferences for assessment techniques. Strategy instructional models should provide specific steps and procedures to help teachers with their job.

Third, parents might find the relationships among these variables notable. They can figure out their children's learning strategies and find reasonable answers of why their children get good grades in some exams while they get better scores in other exams.

References

Bialystok, E. (1990). Communication strategies: A psychological Annalysis of second-language use. Oxford, U.K., Blackwell.

Bialystok, E. (1978). A theoretical model of second language learning. Language Learning, 28, 69-83.

Birenbaum, M. (1994). Toward adaptive assessment-the student's angle. Studies in Educational Evaluation, 20, 239-255.

Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In M. Birenbaum ,& F. Dochy (Eds.), *Alternatives in assessment of achievement, learning processes and prior knowledge*, 3-30. Boston: Kluwer Academic.

Birenbaum, M. (1997). Assessment preferences and their relationship to learning strategies and orientations. *Higher Education*, 33, 71-84.

Birenbaum, M. (2000). New insights into learning and teaching and the implications for assessment. Keynote address at the 2000 conference of the EARLI SIG on assessment and evaluation, September 13, Maastricht, The Netherlands.

Birenbaum, M. and Feldman, R. A. (1998). Relationships between learning patterns and attitudes towards two assessment formats. *Educational Research*, 40 (1), 90-97.

Brown, A. L., Bransford, R., Ferrara, R., and Campione, J. (1983). Learning, remembering, and understanding. In Mussen, P., editor, *Handbook of child psychology: Cognitive development*. 4th edition, 3. New York: John Wiley and Sons, 77-166.

Brown, S., Knight, R., Rust, C., and Gibbs, G. (1994). Strategies for diversifying assessment in higher education. Oxford: The Oxford Centre for Staff and Learning Development, Oxford Brookes University.

Chamot, A. U., Kupper, L. and Interstate Research Associates (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22, 13-24.

Chamot, A. U., O'Malley, J. M., Kupper, L., and Impink-Hernandez, M. V. (1987). A study of learning strategies in foreign language instruction: First year report. Rosslyn, VA: InterAmerica Research Association.

Cohen, A. D. (1998). Strategies in learning and using a second language. Essex, U.K., Longman.

Cohen, A. D. and Scott, K. (1996). A synthesis of approaches to assessing language learning strategies. In R. Oxford (Ed.), *Language learning strategies around the world: Crosscultural perspectives*, 89-106. Manoa: University of Hawaii Press.

Ehrman, M. and Oxford, R. L. (1989). Effects of sex differences, career choice, and psychological type on adult language learning strategies. *Modern Language Journal*, 73, 1-13.

Green, J. M. and Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29 (2), 261-297.

Nunan, D. (1991). Language teaching methodology. London: Prentice Hall.

Nunan, D. (1997). Does learner strategy training make a difference? Lenguas Modernas, 24, 123-142.

O'Malley, M. J. and Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge: Cambridge University Press.

O'Malley, J. M., Chamot, A. U., and Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10, 418-37.

- Oxford, R. (1989). 'The best and the worst': An exercise to tap perceptions of language-learning experiences and strategies. *Foreign Language Annuals*, 22, 447-54.
- Oxford, R. (1990). Language learning strategies: What every teacher should know. Boston: Heinle and Heinle.
- Oxford, R. L. (1996). Language learning strategies around the world: Cross-cultural perspectives. Manoa, Hawaii: University of Hawaii Press.
- Oxford, R. L. (1997). Constructivism: Shape-shifting, substance, and teacher education applications. *Peabody Journal of Education*, 72 (1), 35-66.
- Oxford, R. L. and Carpenter, R. (1985). A new taxonomy of second language learning strategies. Washington, DC: CAL/ERIC Clearinghouse on Languages and Linguistics.
- Oxford, R. L. and Cohen, A. (1992). Language learning strategies: Critical issues in concept and definition. *Applied Language Learning*, 3 (1-2), 1-35.
- Oxford, R. L. and Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *Modern Language Journal*, 73, 404-419.
- Oxford, R. L. and Ehrman, M. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. $System,\ 23,\ 359-386.$
- Oxford, R. L., Lavine, R. Z., and Crookall, D. (1989). Language learning strategies, the communicative approach, and their classroom implications. *Foreign Language Annals*, 22 (1), 29-39.
- Oxford, R. L. and Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal*, 73, 292-300.
- Oxford, R. L., Nyikos, M., and Ehrman, M. (1988). Vive la diffrence? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21 (4), 321-329.
- Oxford, R. L. and Scarcella, R. (1994). Second language vocabulary learning among adults: state of the art in vocabulary instruction. *System*, 22, 231-243.

Rong, J. (1999). The learning style preferences of ESL students. TESOL Quarterly, 21, 87-111.