

The Relationship among Reflective Thinking, Listening Anxiety and Listening Comprehension of Iranian EFL Learners: Does Proficiency make a Difference?

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Abstract

As the main part of a large-scale project, the present study investigated the relationship among reflective thinking, listening anxiety, and listening comprehension of Iranian EFL learners with regard to their proficiency level. To this end, 223 (106 intermediate and 117 advanced) adult male and female Iranian EFL learners from a private language institute took part in the study by completing the Reflective Thinking Questionnaire (RTQ) developed by Kember et al., (2000), the Foreign Language Listening Anxiety Scale (FLLAS) developed by Kim (2000) and a listening comprehension test selected from the listening part of IELTS. Using factor analysis and Chronbach's Alpha, the questionnaires were revalidated and their reliability was re-estimated. The results of Pearson product moment correlations indicated there was a statistically significant: (a) positive association between reflective thinking and listening comprehension, (b) reverse correlation between listening anxiety and listening comprehension, and (c) reverse relationship between reflective thinking and listening anxiety of Iranian EFL learners. Furthermore, the results of multiple regression analysis indicated listening anxiety, compared to reflective thinking, was a significantly stronger predictor of listening comprehension. Additionally, the results of MANOVA revealed there was a significant difference between intermediate and advanced EFL learners with respect to their reflective thinking and listening anxiety. In the light of the findings of the study, foreign language education policy makers in general and EFL teachers in particular are thus recommended to introduce ways to enhance reflective thinking of the students and decrease their listening anxiety if they are to improve their listening comprehension. The results and implications of the study are discussed in more detail in the paper.

Keywords: reflective thinking, listening anxiety, listening comprehension, Iranian EFL learners, intermediate, advanced

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INTRODUCTION

Listening is regarded as the most frequently-used language skill (Scarcella & Oxford, 1992), plays a vital role in communication (Mendelsohn, 1994), and “is probably the least explicit of the four language skills, thus, making it the most difficult skill to learn” (Vandergrift, 2004, p. 1). Listening in general, as described by Oxford (1993), is regarded as a complex problem-solving skill which is not merely the recognition of sounds. Listening comprises understanding of words, phrases, clauses, sentences and connected discourse as well. Development of listening skill, however, might be affected by various factors, among which two variables have been found in the literature to be of paramount importance: reflective thinking (as a sub-category of critical thinking) and anxiety (Vogely, 1998).

The past decade or so has witnessed an increasing attention to reflective thinking and its importance as an element of schooling in the current century has been highlighted by many educational scholars (Willingham, 2007). Reflective thinking or reflection is a part of the critical thinking procedure that especially deals with the practice of analyzing and making judgments concerning what has occurred (Dewey, 1933). As Dewey (1933) states, reflective thinking is concerned with the consequences of thoughts and recommends more physical action to tackle and resolve a diversity of both personal and professional problems. Additionally, reflective thinking is of crucial importance in prompting learning (including listening comprehension) through complex problem-solving situations since it provides students with the opportunity to step back and think about how they resolve problems and how a special set of problem-solving strategies is appropriated to achieve their goal (Dewey, 1933). Thus, it becomes evident that reflective thinking is a necessity for daily activities, because whenever a decision is made, we go through a thinking process (Rudd, 2007).

Another important variable associated with learning (including listening comprehension) is anxiety. In foreign language contexts, anxiety research has mostly focused on oral production (Kimura, 2008). Shift has recently occurred in receptive skills such as listening which is regarded as one of the most effective skills for foreign

language learners (Vogely, 1998). Listening is usually anxiety-inciting. Christenberry (2003) highlights the challenging nature of listening and states that it is regarded as an incredibly complicated subject to teach properly; therefore, listening is likely to be the source of anxiety.

On the one hand, as some scholars (e.g., Oxford, 1990) state, listening comprehension is regarded an essential means of communication and an indispensable part of oral language competence and is usually considered as a difficult skill to master even in one's mother tongue. On the other hand, as mentioned above, reflective thinking is thought to play a crucial role in learning. Moreover, listening is believed to be anxiety-inducing due to its complex nature. However, to our knowledge and based on the extensive review of the literature of the field, little research seems to have been conducted to investigate the impact of reflective thinking and listening anxiety on, or their relationship with listening comprehension of the learners especially in such EFL contexts as Iran.

Thus, taking the above-mentioned significance of listening comprehension into account, considering the necessity to investigate the factors it might be related to or affected by, and taking into account the research gap which is felt to exist in this regard in such EFL contexts as that of the present study, it is deemed essential to find ways to develop learners' listening competence in foreign/second language acquisition by removing or reducing such stumbling blocks in the way as anxiety for instance and enhancing such factors as reflective thinking which might contribute to the development of learners' listening comprehension.

LITRATURE REVIEW

Reflective Thinking

The concept of reflective thinking or what is usually referred to as 'reflection', or 'reflective practice', originates from Dewey's (1933) work, namely '*How we think: re-statement of the relation of reflective thinking to the educational process.*' He states that reflective thinking is an "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that supports it and the further conclusion to which it tends" (Dewey, 1933, p. 9). Ennis (1987) considers reflective thinking as a component of critical

thinking process which refers specifically to the manners of analyzing and making judgments about what has happened.

Theoretical orientation of reflective thinking is perhaps best provided by Mezirow (1998) who proposes that as adults expand and gauge into their personal learning, they will become more and more adaptive and will gradually be able to benefit from their own experiences.

Reflective thinking encompasses four main stages, namely, habitual action, understanding, reflection, and critical reflection (Kember et al., 2000). Habitual action is defined as a learnt activity such as riding a bike or driving a car which is performed automatically. 'Understanding' is defined as "thoughtful action (that) makes use of existing knowledge, without attempting to appraise that knowledge" (Kember et al. 1999, p. 21). 'Reflection' comprises the appraisal of assumptions regarding the content and/or process of problem solving and finally, 'critical reflection', is mainly concerned with a significant change in our perspective (Mezirow, 1991).

According to Jensen and Joy (2005), reflective thinking comprises not only cognitive processes, but it also encompasses social, affective, cultural and political reasoning as well.

Regarding the factors prompting reflective thinking, Song, Koszalka, and Grabowski (2005) conducted a survey on 141 (82 male and 59 female) students from three middle schools. It was found that three clusters of methods, namely, reflective learning environments, reflective scaffolding tools, and reflective teaching methods supported students' reflection. The study indicated that the most effective factor was the reflective learning environment containing the most helpful elements: freedom and collaboration.

The relationship among students' learning approaches, reflective thinking and epistemological beliefs was investigated by Phan (2006) in a two-phased study. 332 students in the University of South Pacific took part in the study by completing the reflective thinking questionnaire. The findings of the study revealed that surface learning approaches predicted habitual action, and deep learning approaches predicted understanding and critical reflection. Habitual action, deep learning approaches, and critical reflection also predicted academic performance. Besides, the study demonstrated that habitual action and reflection were predicted by deep learning approaches.

Regarding the relationship between the four aspects of reflective thinking, namely, critical reflection, reflection, understanding, and

habitual action and academic performance of the learners, several studies have been conducted. In a series of studies carried out by Phan (2007), for instance, it was found that understanding and habitual action were reversely associated with academic performance, while critical reflection and reflection emerged to be positively correlated with academic performance.

In another study conducted by Phan (2008), a structural model that contained three theoretical frameworks, that is, achievement goals (mastery, performance approach, and pre-performance approach), classroom environment, and reflective thinking practice was examined. In so doing, 298 students (142 males and 156 females) from different secondary schools responded to the items of three different instruments. Phan's study dealt with the effects of achievement goals on different features of reflective thinking. The findings demonstrated that mastery and performance goals, and the four phases of reflection were influenced by different facets of the classroom learning environment.

Recently, Zare, Behjat, Abdollahimzadeh, and Izadi (2013) explored the potential bond between Iranian EFL learners' critical thinking and their listening comprehension. The results indicated that critical thinking (including reflective thinking) had a meditating role in indicating students' listening comprehension and interpreting speaker's speech and communicating his purpose.

Also, many studies have been conducted to find the possible relationship between such demographic variables as age, and years of formal education of learners and their reflective thinking. Studies like those of King and Kitchener (1994), and Kuhn (1992) have identified that years of education and/ or learners' level of proficiency are a more prevailing predictor of reflective thinking than other demographic variables.

Listening Anxiety

One of the reasons that make foreign language learning a problematic area might be the fact that individual differences affect language learning process (Aydin, 2009). As an affective factor which might be individually based, test-taking anxiety has recently been studied in different contexts.

Although in the literature on foreign language leaning anxiety, learners have stated that speaking makes the most anxiety (Phillips, 1992), within the researches of speaking anxiety, listening anxiety

gradually began to emerge as a more problematic zone for learners. Vogely (1999) clearly stresses that listening anxiety is one of the most disregarded and probably the most debilitating sort of anxiety. Similarly, Krashen (as cited in Young, 1992) maintains even though speaking is quoted as the most anxiety-provoking skill, listening comprehension is also extremely anxiety-inciting leading to incomprehensibility. Also, MacIntyre (1995) states, L2 listeners are anxious about mis/non-understanding and also worry about embarrassing results.

Several studies have been done on listening anxiety in foreign language contexts. For instance, Kim (2000) investigated the association between listening anxiety and foreign language listening comprehension of Korean EFL students. Two hundred and fifty three EFL learners participated in the study, among whom 20 students also took part in retrospective interviews. The results of correlation analyses showed that listening anxiety had a statistically significant association to both listening proficiency and foreign language anxiety. Furthermore, the results of multiple regression analysis revealed that students' lack of confidence in foreign language listening was a better predictor of listening proficiency. A significant relationship was also found between listening anxiety and two background factors, namely, studying in private institutes and university major.

Elkhafaifi (2005) found that learners' anxiety varied according to their level of ability in foreign language listening. He investigated the relationship between listening comprehension and anxiety in an Arabic language classroom. The results of his study revealed that the learners who suffered higher levels of foreign language learning anxiety were also found to have higher levels of listening anxiety. The findings also indicated that both foreign language learning anxiety and listening anxiety had a reverse correlation with participants' listening comprehension. Regarding two types of anxiety among students of first-, second-, and third-year Arabic, he found that students in third-year Arabic reported significantly lower levels of both types of anxiety than did their counterparts in the first year.

Moreover, some studies have explored the relationship between listening proficiency and listening anxiety. Aneiro (1989) found that her students' apprehension was mostly affected by their listening proficiency level. That is, Aneiro found a significant association between students' low anxiety and their high listening comprehension, which suggests that applying affective strategies to

manage and control anxiety might enhance and facilitate listening comprehension. Other studies such as Elkhafaifi (2005) and Wang (2010) have also found that students' level of anxiety varies according to their level of listening ability.

In the same vein, Serraj and Noordin (2013) explored the possible relationship among Iranian EFL students' foreign language anxiety, foreign language listening anxiety and their listening comprehension. Two hundred and ten Iranian EFL learners took part in their study. The results showed that there was a reverse correlation between foreign language listening anxiety and listening comprehension and also a statistically negative association between foreign language anxiety and listening comprehension, while foreign language anxiety and foreign language listening anxiety enjoyed a significant positive relationship. In addition, the results revealed that the impact of foreign language listening anxiety on Iranian learners' listening comprehension skill was considerably more problematic.

Regarding the sources of listening anxiety, Gonen (2009) believes that students might feel anxious whilst listening in the target language due to several reasons including the authenticity of the listening material, ambiguity of the listening text and environmental causes such as noise and vagueness. Other variables such as the difficulty level and nature of speech, lack of clarity and visual support as well as repetition might be involved in the issue as stated by Vogely (1998).

Listening Comprehension

The significance of listening skill was not recognized up to the early 1970s and it was through works done by such scholars as Asher, Winitz, and also Krashen that the role of listening as an important factor in easing language learning was paid attention (Vandergrift, 2006). According to Scarcella and Oxford (1992), listening is regarded as the most frequently used language skill which is no longer ignored, neither in EFL classrooms nor in SLA research.

Listening comprehension is regarded as a multifaceted active process which is affected by a multitude of factors including differentiating sounds, recognizing vocabulary and grammatical structure, understanding stress and intonation and relating it to the given context (Vandergrift, 1999). Vandergrift believes that listening is an integrative skill as it is typically the first skill that students

develop which helps to acquire vocabulary and grammatical competence as well.

Listening is considered as a cognitive process where the listener's auditory and/or visual receptors receive information in its sound form, and then the received information is filtered by the listener's short-term, working and long term memory (Chamot, 1995). Therefore, as stated by Vandergrift (2006), the listener chooses and interprets information to comprehend it.

PURPOSE OF THE STUDY

Proceeding from what was stated earlier with regard to the significance of reflective thinking and listening anxiety in relation to listening comprehension and bearing in mind that the variables, taken together, and particularly in terms of language proficiency level of the learners, have been, to our knowledge, little researched in the EFL context of Iran, the present study set out to investigate the issue. That is, a major goal was to determine whether (and how) reflective thinking and listening anxiety are related to listening comprehension. The secondary aim of this study was to examine the difference between intermediate and advanced EFL learners in terms of their reflective thinking and listening anxiety. Therefore, to fill the research gap felt and to address the aims of the study, the following research questions were postulated for the present study:

1. Is there any statistically significant relationship between Iranian EFL learners' reflective thinking and their listening comprehension?
2. Is there any statistically significant relationship between Iranian EFL learners' listening anxiety and their listening comprehension?
3. Is there any statistically significant relationship between Iranian EFL learners' listening anxiety and their reflective thinking?
4. Between reflective thinking and listening anxiety, which one is a significantly stronger predictor of Iranian EFL learners' listening comprehension?
5. Do intermediate and advanced EFL learners significantly differ with regard to their level of reflective thinking and listening anxiety?

METHOD

Participants

A total of 223 (106 intermediate and 117 advanced) EFL learners from private language institutes in Kermanshah, participated in the present study. The age of the participants (94 males and 129 females) ranged from 15 to 33 with the mean age being nearly 23. The participants' academic educational level ranged from senior secondary education to tertiary education. The sampling strategy for selection was convenience sampling. The participants were screened into two proficiency levels based on their performance on a listening task taken from the IELTS test. That is, those in the study scoring (1 to 3 standard deviations) above the mean in IELTS were considered as the advanced group and those scoring (1 to 3 standard deviations) below the mean in the test were regarded as intermediate group. It is worth mentioning here that the results of this method of assigning participants into intermediate and advanced groups was tested to match, to a large extent, that gained in the study by applying Defilippis' (1980) method of dividing learners into skillful and unskillful listeners.

Instrumentation

Foreign Language Listening Anxiety Scale

To evaluate listening anxiety, the participants were administered the Foreign Language Listening Anxiety Scale (FLLAS) developed by Kim (2000). The FLLAS consists of 33 Likert-scale items. The respondents were asked to answer the questions by indicating the degree of their agreement or disagreement with the items of the questionnaire on a five-point scale.

This instrument was piloted with 80 participants similar to those of the study and KMO measure of sampling adequacy was run to ensure its validity and to determine whether it was an appropriate and suitable instrument for the Iranian context. The results of KMO indicated that the instrument had an acceptable validity rate (KMO=0.70).

Additionally, Cronbach's alpha consistency was run to calculate the reliability of FLLAS. The reliability of the questionnaire in this study came to be 0.88.

Reflective Thinking Questionnaire

For the purpose of the study, the Reflective Thinking Questionnaire (RTQ) developed by Kember et al. (2000) was used to assess the participants' reflective thinking. The RTQ contains 16 items

concerning actions and styles of thinking during a course of study. The RTQ encompasses four categories of critical reflection, reflection, understanding, and habitual action, which are represented by four scales, each including four items.

RTQ was also piloted with 80 participants similar to those of the present study mentioned above and the results of KMO indicated that this questionnaire had an adequate KMO of 0.70. Additionally, Cronbach's alpha reliability of the questionnaire in this study was calculated to be 0.81.

Listening Comprehension Test

IELTS is considered a valid test that measures English language learners' proficiency level in English. It is accepted worldwide and its validity has been approved frequently. Therefore, in order to determine the participants' listening proficiency, two parts of the listening section of the book '*Cambridge Practice Tests for IELTS 1*' by Jakeman and McDowell (1997), consisting of 20 items, were selected and used. The reliability and validity of the tests included in the series have already been estimated and established (Jakeman & McDowell, 1997). The time allocated for the completion of the listening test was 20 minutes.

Data Collection Procedure

Firstly, RTQ, and FLLAS were administered to the participants of the study. It took nearly 40 minutes for them to complete these two questionnaires. One of the researchers was present at the time of administering RTQ and FLLAS to resolve any possible ambiguities. Secondly, the listening section of the IELTS was administered in order to determine the participants' listening comprehension proficiency. The listening comprehension test administration took about 20 minutes. The data so collected were analyzed quantitatively to provide answers to the research questions.

Data Analysis

The statistical analyses were conducted through using the Statistical Package for Social Sciences (SPSS) version 20. Pearson product moment correlation, multiple regression, and MANOVA were run on the collected data for the purpose of analysis.

RESULTS

As stated earlier, the first research question sought to find whether there was any statistically significant relationship between Iranian EFL learners' reflective thinking and listening comprehension.

To answer this question, a Pearson correlation coefficient was run, the results of which are summarized in Table 1 below.

As is evident in Table 1, there is a statistically significant positive correlation ($r = 0.61$, $N = 223$, $p < 0.05$) between reflective thinking and listening comprehension of Iranian EFL learners (intermediate: $r = 0.00$, $N = 106$, $p > 0.05$; advanced: $r = 0.19$, $N = 117$, $p < 0.05$).

Table 1: The relationship between Iranian EFL learners' reflective thinking and their listening comprehension

| | | Reflective Thinking |
|------------------------------------|---------------------|----------------------------|
| Listening Comprehension | Pearson Correlation | .61** |
| | Sig. (2-tailed) | .00 |
| | N | 223 |

** . Correlation is significant at the 0.05 level (2-tailed).

The second question set out to investigate whether there was any statistically significant relationship between Iranian EFL learners' listening anxiety and listening comprehension. To this end, another Pearson correlation coefficient was run. Table 2 shows the results. As shown in Table 2, there is a statistically significant reverse correlation ($r = -0.63$, $N = 223$, $p < 0.05$) between Iranian EFL learners' listening anxiety and listening comprehension (Intermediate: $r = -0.03$, $N = 106$, $p > 0.05$; Advanced: $r = -0.19$, $N = 117$, $p < 0.05$).

Table 2: The relationship between Iranian EFL learners' listening anxiety and listening comprehension

| | | Listening Anxiety |
|------------------------------------|---------------------|--------------------------|
| Listening Comprehension | Pearson Correlation | -.63** |
| | Sig. (2-tailed) | .00 |
| | N | 223 |

** . Correlation is significant at the 0.05 level (2-tailed).

The third question explored whether there was any statistically significant relationship between Iranian EFL learners' listening anxiety and reflective thinking. In order to answer this question, a Pearson correlation coefficient was run, the results of which are

summarized in Table 3. As is evident from Table 3, there is a statistically significant reverse correlation ($r = -0.40$, $N = 223$, $p < 0.05$) between Iranian EFL learners' listening anxiety and reflective thinking (intermediate: $r = 0.24$, $N = 106$, $p < 0.05$; advanced: $r = 0.02$, $N = 117$, $p > 0.05$).

Table 3: The relationship between Iranian EFL learners' listening anxiety and reflective thinking

| | | Listening Anxiety |
|----------------------------|---------------------|-------------------|
| Reflective Thinking | Pearson Correlation | -.40** |
| | Sig. (2-tailed) | .00 |
| | N | 223 |

** . Correlation is significant at the 0.05 level (2-tailed).

The fourth research question sought to explore between reflective thinking and listening anxiety which one was a significantly stronger predictor of Iranian EFL learners' listening comprehension. A multiple regression analysis was run to answer this research question, the results of which are presented in Tables 4, 5 and 6.

Table 4: Model Summary

| R Square | Adjusted R Square |
|---|-------------------|
| .55 | .55 |
| a. Predictors: (Constant), listening anxiety, reflective thinking | |

Table 5: ANOVA^a

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|--------|------------------|
| Regression | 1239.91 | 2 | 619.95 | 138.42 | .00 ^b |
| Residual | 985.31 | 220 | 4.47 | | |
| Total | 2225.22 | 222 | | | |

a. Dependent Variable: Listening Comprehension

b. Predictors: (Constant), listening anxiety, reflective thinking

As Table 6 indicates, reflective thinking and listening anxiety are significant predictors of listening comprehension. However, as Table 6 indicates, listening anxiety with Beta and t of (-0.45) and (-9.29),

respectively, is a significantly stronger predictor of Iranian EFL learners' listening comprehension.

Table 6: Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | | |
|------------|-----------------------------|------------|---------------------------|------|-------|-------------------------|-----|------|
| | B | Std. Error | Beta | | | Tolerance | VIF | |
| (Constant) | 11.14 | 1.49 | | 7.45 | .00 | | | |
| 1 | Reflective Thinking | .16 | .01 | .43 | 8.83 | .00 | .83 | 1.19 |
| | Listening Anxiety | -.07 | .00 | -.45 | -9.29 | .00 | .83 | 1.19 |

a. Dependent Variable: Listening Comprehension

The fifth research question of the study set out to investigate whether intermediate and advanced EFL learners significantly differed with regard to their level of reflective thinking and listening anxiety. In order to answer this question, a MANOVA was run whose results are summarized in Tables 7 and 8 as follows.

Table 7: Descriptive statistics

| | Level | Mean | Std. Deviation | N |
|----------------------------|--------------|--------|----------------|-----|
| Reflective Thinking | Advanced | 55.01 | 6.66 | 117 |
| | Intermediate | 43.52 | 5.72 | 106 |
| | Total | 49.55 | 8.47 | 223 |
| Listening Anxiety | Advanced | 96.05 | 10.63 | 117 |
| | Intermediate | 123.66 | 16.84 | 106 |
| | Total | 109.17 | 19.60 | 223 |

As Table 8 displays, intermediate and advanced EFL learners significantly differed with regard to their reflective thinking; that is, advanced EFL learners (M=55.01 SD =6.66) were more reflective thinkers than their intermediate counterparts (M=43.52 SD =5.72). In other words, proficiency level of studying English had significant positive effect on EFL learners' reflective thinking.

Table 8: Tests of between-subjects effects

| Source | Dependent Variable | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|--------|--------------------|-------------------------|----|-------------|---|------|
|--------|--------------------|-------------------------|----|-------------|---|------|

| | | | | | | |
|-------|---------------------|------------|-----|----------|--------|-----|
| Level | Reflective Thinking | 7340.66 | 1 | 7340.66 | 188.76 | .00 |
| | Listening Anxiety | 42392.71 | 1 | 42392.71 | 218.28 | .00 |
| Error | Reflective Thinking | 8594.38 | 221 | 38.88 | | |
| | Listening Anxiety | 42919.46 | 221 | 194.20 | | |
| Total | Reflective Thinking | 563579.00 | 223 | | | |
| | Listening Anxiety | 2743284.00 | 223 | | | |

Furthermore, Table 8 indicates that intermediate and advanced EFL learners significantly differed with regard to their listening anxiety; that is, advanced EFL learners ($M=96.05$ $SD =10.63$) had lower levels of listening anxiety than their intermediate counterparts ($M=123.66$ $SD =16.84$). In other words, proficiency level of studying English had significant negative effect on EFL learners' listening anxiety.

DISCUSSION

Reflective thinking and Listening Comprehension

The first research question of the study sought to investigate the relationship between Iranian EFL learners' reflective thinking and listening comprehension. The results showed a statistically significant positive relationship between the two variables.

In other words, it appears that as learners employed reflective thinking, their accountability in learning and requesting the credibility of obtained information increased and, as a result, they listened and comprehended more effectively. Results from this study would denote that a focus on the development of EFL learners' reflective thinking would be beneficial to their listening proficiency. Thus, not paying sufficient attention to enhancing reflective thinking in foreign language courses, in turn, might result in EFL learners' inability in attaining excellence in listening comprehension required of them to be capable of performing well enough in various academic and non-academic situations. This justification can be supported by the claim by Renner (1996) that higher order learning skills as well as students'

language proficiency are developed through higher-order thinking skills (i.e. reflective thinking).

The findings of this study in this respect are in line with those of Zare, Behjat, Abdollahimzadeh, and Izadi (2013) who found that critical thinking, analyzing and reflecting, had a meditating role in indicating listening comprehension, interpreting speaker's speech and communicating speaker's intention.

It is worth mentioning that several investigations previously conducted on reflective thinking (e.g., Griffith & Frieden, 2000; Song, Koszalka, & Grabowski, 2005) indicate that three main areas are chiefly central in prompting students' reflective thinking although numerous aspects can do so.

Firstly, certain teaching methods can impact on the enhancement of learners' reflective thinking. It is believed that instructors, who prefer activities which are inquiry-oriented, help learners to reflect deeply on a situation by providing thoughtful requests.

Secondly, scaffolding instruments like question prompts and collaborative journals also enhance learners' reflective thinking skills (Kinchin & Hay, 2000). For instance, Andrusyszyn and Daive (1997) found that the learners, who took part in writing some interactive journals, recognized the journal as an instrument which facilitated thinking about such issues as one's personal capabilities, summarizing one's learning, etc.

Thirdly, the learning environment can help learners to create meaning profoundly and thoughtfully and therefore enhances their reflective thinking (Song, Koszalka & Grabowski, 2005). According to Williams (1996), presenting instruction controlled by the students inspires them to make their personal conclusions concerning their learning improvement.

Since listening "takes place within the mind of the listener, and the context of interpretation is the cognitive environment of the listener" (Buck, 2001, p.29), it can probably be argued that the inclusion of listening education in all school curricula is an opportunity also for students to enhance reflective thinking skills and vice versa.

Listening Anxiety and Listening Comprehension

The second research question explored the relationship between Iranian EFL learners' listening anxiety and listening comprehension. The results showed that there was a significant reverse correlation

between Iranian EFL learners' listening anxiety and listening comprehension. Hence, not paying enough attention to listening anxiety in foreign language contexts, in turn, might lead to EFL learners' incompetence to gain excellence in listening comprehension.

The findings of the present study in this regard are congruent with the results of previous investigations conducted by Kim (2000); Elkhafaifi (2005); Wang (2010); Mohammadi Golchi (2012); Moradan, Niroo and Kazemian (2013); and Serraj and Noordin (2013), which reveal that when learners' anxiety decreases, their comprehension of listening tasks increases. For one, exploring the association between listening anxiety and foreign language listening comprehension of Korean EFL students, Kim (2000) found that most of the EFL learners experienced foreign language listening anxiety in their classrooms and also in real-life communication. The results also showed that listening anxiety had a significant negative association with listening comprehension. Furthermore, the findings indicated that students had lack of self-confidence and tension over listening comprehension, which are considered as two main sources of listening anxiety.

In the same vein, Serraj and Noordin (2013) explored the relationship among Iranian EFL students' foreign language anxiety, foreign language listening anxiety and their listening comprehension. The results indicated that there was a reverse correlation between foreign language listening anxiety and listening comprehension. In addition, the results revealed that foreign language listening anxiety had a negative effect on Iranian EFL learners' listening comprehension.

The existence of a significant reverse association between listening anxiety and listening comprehension lends support to the notion that an increase in listening anxiety unfavorably affects EFL learners' listening performance (Elkhafaifi, 2005).

Thus, to sum up this part, the findings of the current study as examined by the second research question provide empirical support for the prediction that listening anxiety and listening comprehension are negatively related.

Listening Anxiety and Reflective Thinking

The third question of the study aimed at investigating the relationship between Iranian EFL learners' listening anxiety and their reflective thinking. The results indicated that there was a significant negative

relationship between the two constructs, revealing the fact that those who thought more reflectively had low level of listening anxiety and vice versa.

The findings of this study align with those of Kwon (2008) who investigated the nature of associations between critical thinking (as an umbrella term including reflective thinking) dispositions, and anxiety among 137 undergraduate students. The results of his quantitative and qualitative investigations consolidated each other by revealing negative associations between critical thinking dispositions and anxiety.

The findings in this respect are also in accordance with those of Suliman and Halabi (2007) who investigated the relationship among critical thinking, self-esteem, and state anxiety of nursing students. The results of their study indicated that critical thinking was negatively correlated with students' anxiety.

Therefore, based on the findings of the present study, it can be argued that if we intend to enhance EFL learners' reflective thinking skills, we should reduce their anxiety in general and listening anxiety in particular. Thus, in order to help students improve their reflective thinking, teachers must be able to understand the nature and sources of their students' anxieties. The level and sources of anxiety might vary from one individual to the other of course. Thus, it is recommended that teachers be made aware of what sources of language anxieties their students might be suffering from and to treat them accordingly. Furthermore, it seems plausible for EFL teachers to raise their learners' consciousness of the significance of enhancing their reflective thinking and reducing their listening anxiety.

Prediction of Listening Comprehension from Reflective Thinking and Anxiety

The fourth research question set out to investigate, out of the variables of the study, which one was a stronger predictor of Iranian EFL learners' listening comprehension. The findings revealed that reflective thinking and listening anxiety were moderately correlated and had significant relationship with listening comprehension. The results of multiple regression analysis also showed that both constructs were significant predictors of listening comprehension. Reflective thinking and listening anxiety, taken together, explained 55 percent of the variance in listening comprehension of the learners. It was also revealed that listening anxiety had the most significant

(negative) contribution to the prediction of listening comprehension. Therefore, based on the results of the present study in this respect, it can be implied that if we want to enhance EFL learners' listening comprehension, their listening anxiety should be reduced and their reflective thinking skills improved.

According to this finding, we can argue that both reflective thinking and listening anxiety should be given due attention in teaching listening skills to students as well as listening programs. More attention should be given to reducing listening anxiety at schools to raise good listeners for future since it was found to be better predictor of EFL learners' listening comprehension.

Proficiency Level and Reflective Thinking and Anxiety

The last research question aimed at investigating any possible significant difference between intermediate and advanced EFL learners in terms of their level of both reflective thinking and listening anxiety. The results revealed that intermediate and advanced EFL learners differed significantly with regard to their level of reflective thinking and listening anxiety; that is, proficiency level of studying English had significant positive effect on EFL learners' reflective thinking and had a significant effect on lowering their listening anxiety. The findings in this regard are discussed next.

Firstly, the results showed that advanced EFL learners had significantly higher level of reflective thinking than their intermediate level counterparts. However, since no empirical study was found to directly support or contradict the findings of the present study in this respect, it deems essential to do further research on the relation between EFL learners' proficiency level and their reflective thinking skills.

Secondly, the present study also explored whether intermediate and advanced EFL learners differed with regard to their listening anxiety. The results showed that advanced EFL learners had lower level of listening anxiety than their intermediate level counterparts. That is, the higher the proficiency level of the EFL learners was, the lower their level of listening anxiety was.

This finding can be supported by the results of such studies existing in the field as Aneiro (1989), Elkhafaifi (2005), Wang (2010), and authors (2014) which showed learners' level of anxiety varied based on their foreign language listening ability level. Aneiro

(1989), for instance, found that students' apprehension was generally affected by their listening proficiency level.

Aneiro found a statistically significant association between students' low level of anxiety and their higher performance in listening comprehension which suggests that applying effective strategies in lowering anxiety might enhance and facilitate listening comprehension.

Similarly, authors (2014), in a parallel study investigated listening strategy use, test anxiety and test performance of 40 intermediate and 40 advanced Iranian EFL learners. Employing an Independent Samples t-test, they found that Iranian intermediate-level EFL learners suffered significantly higher levels of test anxiety than their advanced level counterparts. In addition, intermediate-level learners were found to use listening strategies significantly less frequently than their advanced group counterparts.

In agreement with this finding of the present study, the results of a study by Mohammadi Golchi (2012) revealed that Iranian low-anxious IELTS learners performed better in their listening comprehension test than their high-anxious counterparts. In the light of Mohammadi Golchi's study, it was also revealed that learners' years of studying English had a significant reverse effect on their anxiety.

CONCLUSION AND IMPLICATIONS

The findings of the present study indicated that, overall, reflective thinking had a significant positive association with, and was a stronger predictor of EFL learners' listening comprehension, while listening anxiety had a significant negative relationship with both reflective thinking and listening comprehension of Iranian EFL learners. Furthermore, the findings revealed that intermediate and advanced EFL learners differed significantly with regard to both reflective thinking and listening anxiety.

The importance of the findings about the relationships between reflective thinking, listening anxiety and listening comprehension lies not only in their contribution to the literature but also in their remarkable educational implications for instruction and assessment as well as curriculum development.

The main implication of this study would be directed to educational policy makers, syllabus designers, and material developers for listening courses to deem reflective thinking and

listening anxiety as two crucial elements in both academic and future career success of EFL learners. Based on the findings of the present study, it also seems reasonable to suggest that EFL/ESL teachers try to employ educational practices and strategies that help learners develop reflective thinking and reduce their anxiety especially in dealing with such challenging tasks as listening.

The findings might further imply that Iranian EFL teachers should try to detect the potential sources of their students' listening anxiety and present some practical strategies likely to reduce the degree of listening anxiety among foreign language learners and generate a low-anxiety environment. It could also be suggested that the learners with poor reflective thinking ability and higher listening anxiety be identified and treated in order to increase their listening comprehension.

Moreover, EFL teachers are recommended to make students with lower levels of language proficiency (i.e. elementary and intermediate learners) conscious and utilize educational practices and strategies that assist learners in developing reflective thinking skills and in reducing their anxiety especially in handling such demanding skills as listening.

The findings might further suggest that test designers bring about changes in testing methods and develop tests that incorporate reflective thinking in order to enhance students' ability to think and learn independently and reduce their listening anxiety. For example, as for listening comprehension itself, test developers are suggested to design less anxiety-provoking listening comprehension tests by arranging the items of the tests from simple to the most challenging ones, because if the initial items are anxiety-provoking, it would be more difficult for the EFL learners to overcome their stress and manage to answer the rest of the items.

This study, like many other studies, might suffer some shortcomings of course. Thus, a new line of research is suggested for the researchers in the field to investigate the relationship among the subcategories of reflective thinking, namely, habitual action, understanding, reflection and critical reflection, and listening comprehension of EFL learners.

Moreover, as far as language education is concerned, there are such individual differences variables as thinking styles, learning styles, motivation, age, and cultural issues that might influence reflective thinking, listening anxiety and listening comprehension.

Hence, further research is needed to explore the relationship among these variables and reflective thinking, listening anxiety and listening comprehension of EFL learners in various contexts.

Bio-data

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References

- Andrusyszyn, M. A., & Davie, L. (1997). Facilitating reflection through interactive journal writing in an online graduate course: A qualitative study. *Journal of Distance Education*, 12(1), 103-126.
- Aneiro, S. (1989). *The influence of receiver apprehension in foreign language learners on listening comprehension among Puerto Rican college students*. Unpublished doctoral dissertation. New York, NY: New York University.
- Aydin, S. (2009). Test anxiety among foreign language learners: A review of literature. *The Journal of Language and Linguistic Studies*, 5(1), 127-137.
- Buck, G. (2001). *Assessing listening*. Cambridge: Cambridge University Press.
- Chamot, A. U. (1995). Learning strategies and listening comprehension. In D. J. Mendelsohn & J. Rubin (Eds.), *A guide for the teaching of second language listening* (pp. 13-30). San Diego, CA: Dominic Press.

- Christenberry, B. (2003). *Listening comprehension in the foreign language classroom*. Retrieved from <http://langlab.uta.edu/german/ana.rings/fall01gradstudents/2001paperchristenberry.htm>
- DeFilippis, D. A. (1980). *A study of the listening strategies used by skillful and unskillful college French students in aural comprehension tasks*. Unpublished doctoral dissertation. Pennsylvania, PE: University of Pittsburgh.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: Houghton Mifflin.
- Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The Modern Language Journal*, 89(2), 206-220.
- Ennis, R. H. (1987). Taxonomy of critical thinking dispositions and abilities. In J. Baron & R. Sternberg (Eds.), *Teaching thinking skills: Theory and practice* (pp. 9-26). New York, NY: W.H. Freeman.
- Gonen, M. (2009). The relationship between FL listening anxiety and foreign language listening strategies: The case of Turkish EFL learners. *Proceedings of the 5th WSEAS/IASME International Conference on Educational Technologies (EDUTE' 09)*.
- Griffith, B., & Frieden, G. (2000). Facilitating reflective thinking. *Counselor Education & Supervision*, 40(2), 82-92.
- Jakeman, V., & McDowell, C. (1997). *Cambridge practice tests for IELTS 1*. Cambridge: Cambridge University Press.
- Jensen, S. K., & Joy, C. (2005). Exploring a model to evaluate levels of reflection in baccalaureate nursing students' journals. *The Journal of Nursing Education*, 44(3), 139-142.
- Kember, D., Jones, A., Loke, A., McKay, J., Sinclair, K., Tse, H., Webb, C., Wong, F., Wong, M., & Yeung, E. (1999). Determining the level of reflective thinking from students' written journals using a coding scheme based on the work of Mezirow. *International Journal of Lifelong Education*, 18(1), 18-30.
- Kember, D., Leung, D.Y.P., Jones, A., Loke, A.Y., McKay, J., Sinclair, K., Yeung, E. (2000). Development of a questionnaire to measure the level of reflective thinking. *Assessment and Evaluation in Higher Education*, 25(4), 382-395.
- Kim, J. H. (2000). *Foreign language listening anxiety: A study of Korean students learning English*. Unpublished doctoral dissertation. Austin, TE: University of Texas.
- Kimura, H. (2008). Foreign language listening anxiety: Its dimensionality and group differences. *JALT Journal*, 30(2), 173-196.
- Kinchin, I. M., Hay, D. B., & Adams, A. (2000). How a qualitative approach to concept map analysis can be used to aid learning by illustrating patterns of conceptual development. *Educational Research*, 42(1), 43-57.

- King, P., & Kitchener, K. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. San Francisco, CA: Jossey-Bass.
- Kuhn, D. (1992). Thinking as argument. *Harvard Educational Review*, 62(2), 155-178.
- Kwon, N. (2008). A mixed-methods investigation of the relationship between critical thinking and library anxiety among undergraduate students in their information search process. *College & Research Libraries*, 69(2), 117-131.
- MacIntyre, P. D. (1995). How does anxiety affect second language leaning? A reply to Sparks and Ganschow. *Modern Language Journal*, 79(1), 90-99.
- Mendelsohn, D. J. (1994). *Learning to listen: A strategy-based approach for the second-language learner*. San Diego, CA: Dominic Press.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Brass.
- Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, 48(3), 185-198.
- Mohammadi Golchi, M. (2012). Listening anxiety and its relationship with listening strategy use and listening comprehension among Iranian IELTS learners. *International Journal of English Linguistics*, 2(4), 115-128.
- Moradan, A., Niroo, Z., & Kazemian, E. (2013). The Relationship between test anxiety and listening comprehension among EFL students of Kerman University. *Asian Journal of Research in Social Sciences and Humanities*, 3(10), 143-152.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House/Harper & Row.
- Oxford, R. L. (1993). Research update on teaching L2 listening. *System*, 21(2), 205-211.
- Phan, H. P. (2006). Examination of student learning approaches, reflective thinking, and epistemological beliefs: A latent variables approach. *Electronic Journal of Research in Educational Psychology*, 10(4), 577-610.
- Phan, H. P. (2007). Examination of student learning approaches, reflective thinking, and self-efficacy belief at the university of the South Pacific: A path analysis. *Journal of Educational Psychology*, 27(6), 789-806.
- Phan, H. P. (2008). Unifying different theories of learning: Theoretical framework and empirical evidence. *Educational Psychology*, 28(3), 325-340.
- Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *The Modern Language Journal*. 76(1), 14-26.

- Renner, C. E. (1996). *Enrich learners' language production through content-based instruction*. Paper presented at a National Conference on Lingua e Nuova Didattica, Modena, Italy.
- Rudd, R. D. (2007). Defining critical thinking. *Techniques*, 82(7), 46-49.
- Scarcella, R. C., & Oxford, R. L. (1992). *The typstry of the language learning: The individual in the communicative classroom*. Boston, MA: Heinle & Heinle Publishers.
- Serraj, S., & Noordin, N. (2013). Relationship among Iranian EFL students' foreign language anxiety, foreign language listening anxiety and their listening comprehension. *English Language Teaching*, 6(5), 1-12.
- Song, H. D., Koszalka, T. A., & Grabowski, B. (2005). Exploring instructional design factors prompting reflective thinking in young adolescents. *Canadian Journal of Learning and Technology*, 31(2), 49-68.
- Soodmand Afshar, H., & Hamzavi, R. (2014). Listening strategy use, test anxiety and test performance of intermediate and advanced Iranian EFL learners. *Applied Research on English Language*, 3(2), 101-116.
- Suliman, W. A., & Halabi, J. (2007). Critical thinking, self-esteem, and state anxiety of nursing students. *Nurse Education Today*, 27(2), 162-168.
- Vandergrift, L. (1999). Facilitating second language listening comprehension: Acquiring successful strategies. *ELT Journal*, 53(3), 168-176.
- Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning*, 53(4), 463-496.
- Vandergrift, L. (2004). Listening to learn or learning to listen?. *Annual Review of Applied Linguistics*, 24(1), 3-25.
- Vandergrift, L. (2006). Second language listening: Listening ability or language proficiency?. *The Modern Language Journal*, 90(1), 6-18.
- Vogely, A. J. (1998). Listening comprehension anxiety: Students' reported sources and solutions. *Foreign Language Annals*, 31(1), 67-80.
- Vogely, A. J. (1999). Addressing listening comprehension anxiety. In D. J. Young (Ed.), *Affect in foreign language and second language learning. A practical guide to creating a low-anxiety atmosphere* (pp.106-123). Boston, MA: McGraw-Hill.
- Wang, S. (2010). An experimental study of Chinese English major students' listening anxiety of classroom learning activity at the university level. *Journal of Language Teaching and Research*, 1(5), 562-568.
- Williams, J. M. G. (1996). Autobiographical memory in depression. In D. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 244-267). Cambridge, UK: Cambridge University Press.
- Willingham, D. T. (2007). Critical thinking: Why is it hard to teach? *Arts Education Policy Review*, 109(4), 21-29.

- Young, D. J. (1992). Language anxiety from the foreign language specialists' perspective: Interviews with Krashen, Omaggio, Hadley, Terrell, and Rardin. *Foreign Language Annals*, 25(2), 157-172.
- Zare, M., Behjat, F., Abdollahimzadeh, S. J., & Izadi, M. (2013). Critical thinking and Iranian EFL students' listening comprehension. *International Journal of Linguistics*, 5(6), 12-21.