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The Relationship between L2 Listening Comprehension and Listening Fatigue among Iranian Intermediate EFL Learners

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Abstract

Listening is referred to by many scholars as the most important as well as the most complicated skill in the language, which can cause mental fatigue in the learners. This study was an attempt to investigate the relationship between L2 listening comprehension and listening fatigue among Iranian EFL learners. For this purpose, 86 intermediate and upper-intermediate Iranian EFL learners randomly selected after administering a paper-based TOEFL among an initial sample of 120 BA learners majoring in English language translation, took part in the study. A TOEFL listening test and a researcher-made validated listening fatigue questionnaire were utilized in order to gather the necessary data. Afterwards, during the qualitative phase, oral interviews were employed to obtain 30 % of the participant's' attitudes about the relationship between listening comprehension and listening fatigue. Applying a Pearson product-moment correlation revealed that there was a significant relationship between L2 listening fatigue and their listening comprehension. These findings were also supported by a small qualitative phase and learners gave their positive support and attitude about the relationship. These findings have some pedagogical implications for teaching and learning an L2, the most important of which is that in order to enhance EFL learners' L2 listening comprehension, it is better to reduce their debilitative listening fatigue.

Keywords: L2 listening comprehension, listening fatigue, EFL learners

Introduction

Among language skills, listening has turned out to be the mostly ignored skill by both language teachers and learners. According to Purdy (1997), writing, reading, and speaking are considered communication skills that are given more preference in the formal instruction and are usually taught in this order, while listening skill receives relatively low priority and little attention. Many other scholars have confirmed the ignorance of listening skill, pointing out to a variety of reasons (e.g., Brownell, 2002; Janusik, 2004; Osada, 2004; Seo, 2002; Walker, 2014). Of course, this problem is more serious in EFL contexts where there is no natural exposure to English. Although listening has not been adequately considered and practiced in language classrooms, its importance cannot be denied at all. A lot of L2 scholars and researchers regard it the most important skill in the language. (e.g., Guo & Wills, 2006; Hamouda, 2013; Morley, 2001; Peterson, 2001; Yıldırım & Yıldırım, 2016). Morley (2001) states that listening preoccupying about 50% of everyday communication develops faster than other language skills and provides the essential basis for their efficient development.

Getting to recognize the importance of listening, many studies began to explore its different aspects and identify the potential factors which can impact on the listening performance of different learners (e.g., Anderson & Lynch, 1988; Bloomfield et al., 2010; Buck, 2001; Chang & Read, 2008; Chen, 2005; Goh, 1999; Rubin, 1994). Overall, before 19th century, listening research mostly concentrated on the link between linguistic factors and learners' listening comprehension, whereas after this period, following the advent of learner-centered approaches, studies began to examine the relationship between individual differences (IDs) in cognitive and affective factors and the learners' performance on listening comprehension. More specifically, a great volume of research has tried to identify a list of factors negatively related to or affecting the learners' listening performance, known as 'problems or barriers to effective comprehension' (e.g., Azmi et al., 2014; Gilakjani & Ahmadi, 2011; Goh, 2000; Liu, 2002; Nowrouzi et al., 2015; Renukadevi, 2014; Ur, 2007)

The findings of the above studies resulted in a comprehensive literature on a variety of problems that listeners encounter in the process of comprehension. Generally, these studies categorized listeners' difficulties under such factors as text, speaker, task, environment, and listener characteristics. Put it another way, according to Chen (2013), most listening problems are due to external factors such as text or task rather than internal factors such as learners' anxiety. In fact, the conducted studies have mostly

related the listening obstacles to linguistic or external factors and have underestimated the role that the listeners' internal characteristics can play in comprehension. Bloomfield et al. (2010) mentioned that the mental state of listeners is also of high significance and can easily influence the learners' ability to comprehend what has been said. More accurately, if a listener is anxious, stressed, distracted, or unable to concentrate, it will be much more difficult to process what is being said. When all these negative feelings co-occur in comprehension, listening fatigue may emerge.

Although in recent years, some scholars have theoretically named fatigue among the listener's characteristics, which can diminish their performance, there is a severe paucity of research delving into the relationship between listening comprehension and listening fatigue. This research is an attempt to see that whether this link exists or not, and if it exists, what consequences it can bear in the comprehension process.

The present research sought to answer these research questions:

RQ1: Is there any significant relationship between L2 listening fatigue and listening comprehension among Iranian EFL learners?

RQ2: What are the Iranian EFL learners' attitudes toward the relationship between L2 listening fatigue and listening comprehension among Iranian EFL learners? Do the findings obtained through the quantitative and qualitative results converge or diverge?

Method

Participants

A total of 120 B.A. students majoring in English translation and literature at Islamic Azad University of Hamedan were selected from among four different classes based on convenience sampling. In order to obtain a more homogeneous sample, a version of TOEFL test was administered to select 90 participants from the same proficiency level as the ideal sample for the study. The sample consisted of both male and females with the age range of 19 to 35 from different socio-economic backgrounds and mother tongues such as Persian, Kurdish, Lori and Turkish. These 90 students reduced to 86 learners since four of the learners left the study.

Instrumentation

The instruments used for the purpose of data collection included a Paper-based TOEFL Test, a Listening Test, and the Listening Fatigue Questionnaire whose characteristcs including the format and content are described below.

Test of TOEFL. At the beginning of the study in order to choose homogeneous subjects in terms of their proficiency level, a version of paper-based TOEFL was employed. Due to the lack of audio facilities and for the ease of administration, the listening section was excluded from the whole test. Moreover, because of the lack of qualified TOEFL scorers and due to the difficulty of scoring, TWE essay section was also excluded. Therefore, the test included only structure and written expression section as well as the reading comprehension part. Overall, this TOEFL consisiting of 90 items including reading comprehension, grammar and vocabulary was given to the initial participants in order to have homogenized participants. The reliability of the test was calcuted using KR-21 formula and it came out to be .80.

Test of Listening. In order to measure the listening ability of the learners, a TOEFL listening comprehension test consisting of 50 items was used. In fact, a version of listening test was taken from the paper-based TOEFL (PBT) test appropriate to the learners' proficiency level. It had a three-part structure of 50 total multiple-choice questions, designated on the exam as parts A, B, and C. Part A included very brief excerpts from two-person conversations and had 30 questions. Part B, consisting of 10 questions, featured longer conversations between two speakers and students answered several questions about each conversation, provided by a narrator on the recording. On part C, students listened to lecture excerpts approximately one minute in length, and then answered questions read by the narrator. Generally, it took about 30-40 minutes to complete this tets. The reliability of the test was calcuted using Cronbach alpha. It turde out to be .81.

Listening Fatigue Questionnaire. The instrument used to measure the students' fatigue value during listening performance was a self-made questionnaire constructed by the researcher, which consisted of 21 items based on the different available questionnaires on both mental and physical fatigue which had been already used in occupational and medical settings. The researcher chose the appropriate relevant items from the available inventories including The Shortened Fatigue Questionnaire, (Alberts et al. 1997), The Scale for Perceived Load (Van Veldhoven & Meijman, 1994), The Rating Scale Mental Effort (Zijlstra, 1993), The Checklist Individual Strength (Vercoulen et al., 1994), made the necessary modifications, used the expert opinions and finally, after adapting three versions, he came up with the last version of the questionnaire. In fact, all the necessary measures were taken by the researcher in order to develop a reliable and valid instrument suited and applicable to Iranian EFL context. This instrument was a five-point Likert scale questionnaire and students were asked to

choose one of the options: never, rarely, sometimes, often, and always based on how they felt after their listening performance. In order to make the test reliable and valid, it was piloted with a group of 35 learners having characteristics similar to those of the main study. The reliability of the questionnaire was calculated using Cronbach alpha and it was shown to be 0.79.

Semi-Structured Oral Interview. Semi-structured oral interviews were conducted with 30 percent (23 participants) to elicit their attitudes toward the relationship between L2 listening comprehension and L2 listening fatigue. These oral interviews were audio-taped by the resaercher himself and were meticuously listened and transcribed for further analysis. In order to gauranttee the content validity or the inter-coder reliability, two raters rated these oral interviews and the needed content analysis using the appropriate procedures was carried out. Transcribing, coding, and sorting the data gathered in these oral interviews were conducted by using MAXQDA. MAXQDA is a software program that aids researchers for carrying out computer-assisted qualitative and mixed methods data, text and multimedia analyses in all humanities and social sciences and in applied linguistics studies. The question used in the interview was as follows:

- What do you think about the relationship between L2 listening comprehension and listening fatigue or anxiety?

Procedure

As to the first phase of the study, the researcher selected the participants from among four different classes at the B.A. level from Islamic Azad University, Hamedan Branch. After administering the test of TOEFL, those 90 learners who scored in the range of ±1.5 standard deviations from the mean were selected as the intermediate learners for the purpose of the present study. Eighty-six of the participants had the listening comprehension test and the fatigue questionnaire. Before its administration, the listening fatigue questionnaire was piloted to a similar group including 35 learners to check its reliability and validity. The reliability of this five-Likert 21-item questionnaire was calculated using Cronbach alpha. It was 0.79. All other statistical indices including item facility, item discrimination, choices distribution, and item reliability were acceptable and some minor modifications were added. Finally, 30 percent of them (23 learners) were orally interviewed to check their attitudes towards the relationship between L2 listening comprehension and listening fatigue.

Data Analysis

For analyzing the calculated data, the SPSS software version 21 was used. This software was also used to calculate the reliability of the developed questionnaire and other descriptive statistics which were needed to describe the features of the sample including minimum and maximum scores, mean, standard deviation, and SEM. Also, normality test of Kolmogrove and Shapiro were used to check the assumptions for using Pearson correlation. The related nromality distribution figures and P-P Plots were also provided using SPSS to help gain a better view of the descriptive statistics. The researcher used the parametric Pearson product-moment correlation to determine the relationship between listening comprehension scores and listening fatigue scores in answering question 1. Qualitative interpretations using qualitative interpretations were also utilized to find regularities in Iranian EFL learners' attitudes toward the relationship between L2 listening comprehension and listening fatigue for answering questions 2. The final conclusions were made based on the results of both the quantitative and qualitative phases.

Results

To achieve homogeneity among the learners regarding their general English proficiency and to select the sample, a paper-based TOEFL test was given at the outset. This TOEFL test included 90 items and its reliability turned out to be .80 calcuted using KR-21 formula. The results of the administered paper-based TOEFL can be seen in the Table 1:

Table 1
Descriptive Statistics for the TOEFL test

	N	Minimum	Maximum	Mean	Std. Deviation
Homogeneity	120	26	72	48.64	12.32
Valid N (list wise)	120				

As you can see in Table 1., the descriptive statistics provided by the SPSS program revealed that the minimum score was 26 and the maximum score was as high as 72. The mean score was 48.64 with a standard deviation of 12.32. Then, 90 students whose scores fell between ±1.5 standard deviation from the mean score were selected. Afterwards, a valid and reliable TOEFL listening comprehension test was given. Then, a researcher-made listening

fatigue questionnaire was given to the participants. The reliability of the listening fatigue questionnaire in the main study was .81.

Listening fatigue questionnaire's reliability values in the current study, with a number of 21 items on a 5-point Likert scale, were .79 for the pilot study and .81 for the main study which are strong indexes. Such high reliability values show that the questionnaire results are dependable.

A factor analysis was first run to establish the construct of listening fatigue for foreign language learners. The factor analysis was done, using a principal component analysis with oblique rotation (*N*=86). To determine the number of factors to be extracted in the listening fatigue for foreign language learners' questionnaire, some standards were followed to guarantee that the minimum eigenvalue was 1.0, and that each factor accounted for at least 2.5% of the total variance.

Table 2
Cronbach Alpha, Questionnaire Items, and Factor Loadings of the Items for Each Subscale of Listening Fatigue Questionnaire

Factor (subscales)	α	Questionnaire items	Loadings
1. Anxiety/Stress/Depression	.82	2. I get worried when I have to listen to a text quickly.	.78
		5. I get nervous during listening tasks when I do not understand every word.	.79
		6. When I am listening to a text, it is difficult for me to differentiate the words from one another.	.75
		7. When I am listening to a text, I often get so stressed that I cannot remember what I have heard.	.80
		8. Listening to new information makes me uneasy.	.74
		9. I feel nervous when I fall behind during listening to a text.	.82
		10. I get upset when I am not sure whether I understand what I am listening to.	.80
		11. I sweat noticeably while trying to understand a listening text.	.73
		16. I experience negative thoughts while listening to a very difficult text	.78

		21. Learning to understand spoken English is the hardest part of learning English for me.	.82
2. Attention/Distractibility/ Concentration	.79	3. It is hard for me to concentrate on what an English speaking person is saying unless I know that person.	.69
		4. I become confused when listening to important information.	.73
		12. It is difficult for me to listen to a text when there is even a little bit of background noise.	.65
		13. I am intolerant of anything that keeps me away from getting on with a listening task.	.69
		14. I have difficulty paying attention to a listening task for long periods of time.	.78
3. Emotional Exhaustion/ Tiredness	.76	1. I feel stressed prior to doing a listening task.	.59
		18. I feel emotionally drained after doing a listening task.	.66
		20. In general, it takes me some time to feel relaxed after listening to a text.	.67
4. Cognitive Effort	.74	15. It takes a lot of effort for me to concentrate on listening texts.	.70
		17. At the end of a listening task, I feel worn-out.	.69
		19. After completing a listening task, I am unable to think clearly.	.67

As shown in Table 2, four factors were elicited which accounted for the total variance in the learners' L2 listening fatigue. Among the four factors, factor 1 had the largest α and loading values, whereas factor 4 had the smallest α and loading values. The items loaded on the following components:

I. ***Anxiety/Stress/Depression:*** Listeners are always concerned about the complexity, fastness and difficulty of listening passages. Therefore, listening comprehension is not at learners' full control at all settings and thus highly anxiety-provoking.

II. ***Attention/Distractibility/Concentration:*** A high degree of concentration and careful attention is needed in a limited time to process a large amount of information. Thus, listening comprehension is highly subject to fatigue.

III. ***Emotional Exhaustion/Tiredness:*** Maslach (2001) refers to emotional exhaustion as feelings of being overextended and depleted of one's emotional and physical resources.

IV. ***Cognitive Effort:*** Listening is a mental activity in which a number of mental processes are at work and should be taken into account simultaneously in order to reach comprehension. These mental processes are generally grouped under the term cognitive effort.

As shown in table below, there were two variables in the current study. Table 3. provides the descriptive statistics for the performance of all participants on the listening test and the listening fatigue questionnaire.

Table 3
Descriptive Statistics for Participants' Performances on LC Test L2 Listening Fatigue Questionnaire

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
LC	86	10	26	17.66	3.981	.217	-.657
LF	86	30	60	45.47	6.728	.144	-.451

The minimum and maximum scores on the listening comprehension test were 10 and 26, respectively, the mean score was 17.66 with a standard deviation of 3.98. As it can be seen from the table, the mean for the Iranian EFL learners' listening fatigue scores was 45.47 with a standard deviation of 6.72. The minimum and maximum scores were 30 and 60, respectively. The skewness and kurtosis values were also with the acceptable range ±1.96 for the two tests, indicating the normality of the distribution of scores. The normality of the distributions was also shown in the histograms as follow:

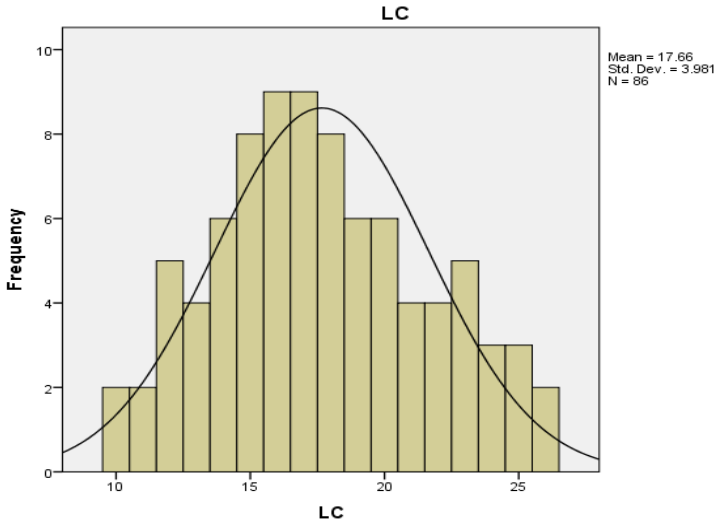

Figure 1. Learners' scores on the listening comprehension test

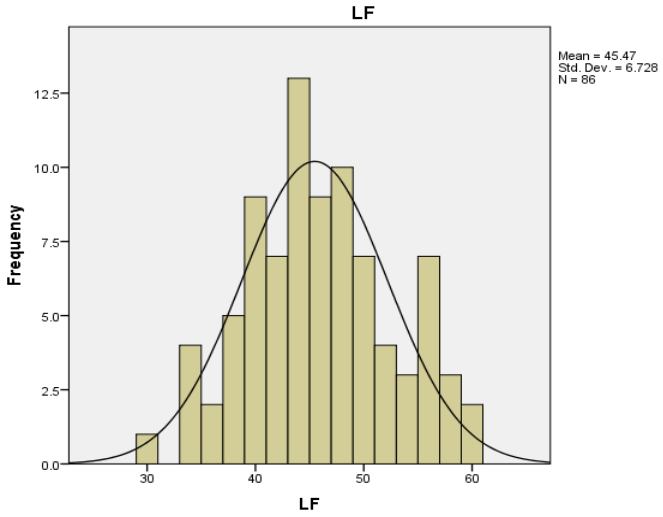

Figure 2. Learners' scores on the listening fatigue questionnaire

However, to make sure that the distributions of listening comprehension and listening fatigue scores were normal, the Kolmogorov-Smirnov and Shapiro-Wilk's tests of normality were also used.

Table 4
Kolmogrov- Smirnov and Shapiro-Wilk's Test of Normality for the Pretest Scores

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
LC	.089	86	.087	.976	86	.114
LF	.063	86	.200*	.985	86	.397

The Kolmogrove-Smirnov and Shapiro-Wilk's tests of normality indicated that the participants' scores on the LC and LF were normally distributed. The significance P>.05 for both tests showed that the related distributions of two sets of scores were normal. The related Normal Q-Q plots, Detrended Normal Q-Q Plots, and boxplots indicated that there were not any outliers in the distributions of two sets of scores.

The first research question attempted to examine whether there was any significant relationship between L2 listening fatigue and listening comprehension among Iranian EFL learners. Accordingly, participants' listening scores and their scores on the listening fatigue questionnaire should be fed into Spearman product-moment correlation to check the relationship between the leaners' listening comprehension ability and the listening fatigue. However, the assumption of Spearman product-moment correlation should be fully considered. The first assumption requires that the two variables should be measured at the interval or ratio level (i.e., they are continuous). The two main independent variables of the current study were measured at interval level. Based on assumption 2, a linear relationship should exist between the two variables.

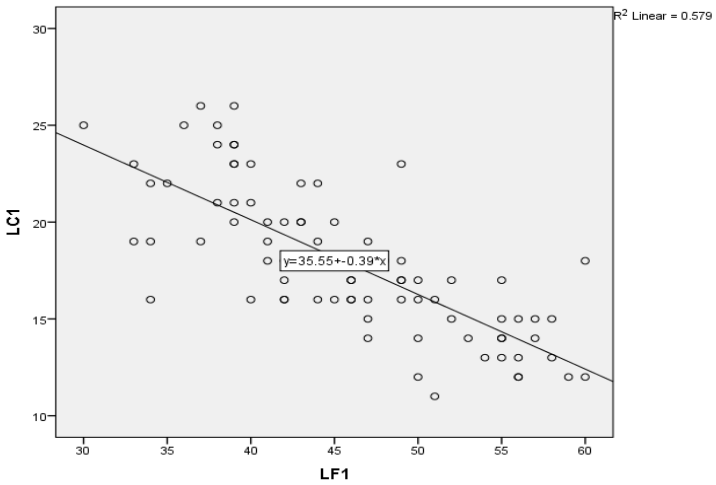

Figure 3. The fit line for the relationship between LC and LF

A negative linear relationship can be seen between the two measures used in the current study (LC & LF) in Figure 3. The presence of all the needed assumptions helped the researcher apply the correlation procedure in SPSS program the results of which are presented in the following table.

Table 5
Pearson Product-Moment Correlation for the Relationship between Learners' Pretest and Posttest LC and LF Scores

		LC	LF
LC	Pearson Correlation	1	-.761**
	Sig. (2-tailed)		.000
	N	86	86
LF	Pearson Correlation	-.761**	1
	Sig. (2-tailed)	.000	
	N	86	86

Pearson product-moment statistical procedure showed that there was a strong, negative correlation between LC and LF scores, which was statistically significant (r = -.761, n = 86, p = .000). In addition, we can say that 57.91% (0.761^2) of the variation in LF scores is explained by LC performance. This means that generally there was a strong negative relationship between L2 listening comprehension and listening fatigue.

The qualitative analysis of the results of the oral interviews indicated that the majority of the learners unanimously expressed that there is a negative relationship between L2 listening comprehension skill and the amount of listening fatigue. Majority of learners reported a strong negative relationship and some advocated a rather moderate negative relationship. Participant number 23 said that "*I think these two variables are acting against each other and I have experienced it myself in many test occasions; whenever I feel more fatigue, I cannot find the correct answers. And that is not limited to listening tests, rather during any listening that I feel boredom and fatigue, I cannot listen and understand meticulously*". Yet, participant number 42 mentioned that "*I think there is a bilateral relationship between listening comprehension skill or performance and listening fatigue. Whenever, I do badly on a listening test or task, I feel more fatigue and vice versa*".

Consequently, the results of the qualitative analysis supported the existence of relationship between L2 listening comprehension performance and the amount of listening fatigue felt by Iranian EFL learners. As aforementioned, the results of the two phases of the current explanatory mixed-methods design converged and allow us to be more certain in our claim about the mutual negative connection between the two target variables.

Discussion

This study tried to investigate the relationship between listening comprehension ability and listening fatigue among Iranian learners of English to see whether their listening performance can be subject to fatigue as an internal psychological characteristic of the learners. On the whole, the obtained results showed that there was a strong negative relationship between the listening comprehension ability and the listening fatigue of the Iranian EFL learners. Despite the fact that fatigue has been theoretically referred to by several researchers as a potential factor in the process of listening comprehension, by itself, it has not been practically investigated either in EFL or ESL context. However, there have been many research studies, generally, on the issue of fatigue either in demanding occupational settings, or in patients suffering from medical problems, or in school-age children with hearing-impairments and the effect it produces on the physical, behavioral and academic performance of these individuals respectively (e.g., Beebe, 2011; Berrin et al., 2007; Gaba & Howard 2002; Garralda & Rangel, 2002; Hicks & Tharpe, 2002; Kramer et al. 2006;

McCabe, 2009; Ravid et al. 2009).These studies have all shown that fatigue is associated with reduced academic performance, increased school absences, an inability to engage in usual daily activities, demotivation, sleep disturbances, feelings of weariness or tiredness, changes in social relationships, reduced vigour or energy, a decreased motivation to continue a task and a negative change in life quality.

The above-mentioned studies all approving of the negative consequences of fatigue attracted the attention of L2 researchers to seek to find out whether listening comprehension as the most complicated and challenging language skill can be related to fatigue or not. As mentioned by many researchers, the affecting factors on the comprehension ability were generally grouped under the four categories of text or task characteristics, environmental characteristics, speaker or interlocutor characteristics and finally the listener's characteristics (e.g., Anderson & Lynch, 1988; Bloomfield et al., 2010; Boyle, 1984; Buck,2001; Chang & Read, 2008; Chen, 2005; Goh, 1999; Nichols, 1948; Rubin, 1994). Among these factors, fatigue has been pointed out by some few researchers as a listener's characteristic which can impact on learners' performance. For instance, Nichols (1948) in his investigation of the potential variables which might effect on the students' listening comprehension provided adequate evidence in favor of factors such as: *intelligence, reading comprehension, recognition of correct English usage, size of the listener's vocabulary, ability to make inferences, audibility of the speaker* and finally *Physical fatigue of the listener.* Therefore, in agreement with the current research, it is shown that one of the important factors effective in listening comprehension is the state of physical fatigue in the listeners.

Furthermore, Bloomfield et al. (2010) represented a scientific report of the existing literature in which many factors were shown to affect the learners' ability in listening comprehension. These factors were classified under the three main characteristics of *the listener*, *the passage*, and *the test-taking conditions*, among which such factors as *working memory, L2 proficiency*, *anxiety*, *authenticity, text type* and *complexity*, *auditory features*, and finally *time limits, ,* and *note-taking* are respectively noticeable (Bloomfield, et al., 2010). In fact, this report by Bloomfield and his colleagues revealed that the aforementioned discovered characteristics reflect the potentiality of listening fatigue as a crucial factor in the comprehension process. More specifically, in addition to the above factors which can be classified as general cognitive abilities or linguistic factors, Bloomfield et al. (2010) mentioned that the mental state of listeners is also of high significance and can easily influence the learners' ability to

comprehend the message. More accurately, when a listener is worried, distracted, and unable to concentrate, it will be much more difficult to process what is being said. In the same line, listening fatigue as a cognitive phenomenon is characterized by difficulties in concentration, increased distractibility, feelings of anxiety, reduced attentiveness, alertness, and decreases in mental energy or efficiency (Lieberman, 2007; Boksem & Tops, 2008).

In fact, although there has been practically no research project directly addressing listening fatigue, many studies exist which have investigated the relationship between different components of listening fatigue and listening performance. Listening fatigue in this study was shown to be consisting of such variables as stress, anxiety, distraction, inattention, emotional exhaustion or tiredness and cognitive effort. Goh (1999), in his comprehensive study on the factors that influence the learners' listening comprehension showed that such individual characteristics as fatigue along with anxiety, nervousness and impatience, memory, attention and concentration, as well as interest are altogether categorized under the physical and psychological state of the listener which can be directly related to and influencing the listening ability of the learners.

In another study by Chen (2013), exploring the sources of difficulties learners face with during listening performance, he concluded that contrary to the learners' tendency to falsely assume or blame their listening difficulties on external factors of text or task, there are other internal factors among which learners' anxiety is considered the most important. Similarly, Renukadevi (2014) in a review of the reasons why learners feel listening is difficult referred to listener's concentration power or listening stamina greatly influencing their listening skills, which is not so in the case of acquiring the other language skills even when they are carried for a longer period of time. In addition, distraction by the physical setting or the environment in which listening is to be carried out, was pointed out as another cause of learners' difficulty in listening (Renukadevi, 2014). In another study on academic listening by Hamouda (2013), more than 75% of the learners remarked that they felt fatigue and distracted while listening to a long spoken text (25% sometimes, 26.7% often and 33.3% always). Therefore, memory problems including fatigue can divert the listeners' attention from comprehending the meaning of the passage and hence due to a break in concentration, listeners may lose the rest of the text (Hamouda, 2013).

As seen, all of the above studies in the same line with the current research confirm that there is a direct relationship between such factors as concentration power, distraction, fatigue or mental exhaustion, interest, anxiety or stress on the one hand and listening ability of the learners on the other hand. Therefore, as both the quantitative and qualitative results show, listening fatigue as a multicomponent phenomenon can be considered as a main factor exerting variation in listening performance of different individuals.

The main finding of this investigation that was supported both by the quantitative and qualitative data analyses divulged that L2 listening comprehension and listening fatigue were strongly but negatively correlated. In the quantitative phase, the results showed that when listening fatigue increased in the learners, their listening performance decreased and they encountered reduction in their listening test scores. That is, when the test scores on the listening fatigue questionnaire went up, the scores on the TOEFL listening test decreased. On the other hand, when learners' listening fatigue scores were down, that is, they didn't feel distracted, demotivated, tired, and uninterested and in return they were at the best psychological status and full of energy, their performance in listening comprehension improved and they reached higher scores in listening test.

The findings in the qualitative phase of the study were also in the same direction and advocated the quantitative results. That is, the findings obtained through interviewing with 10% of the participants altogether confirmed that there is a strong but negative relationship between listening fatigue and listening comprehension ability of the Iranian EFL leaners. When learners were asked how they felt at the end of the study, they all responded that being in good mood and high spiritual conditions accompanied with higher motivation and increased energy level to perform on the listening test and vice versa.

The findings of the present study bear some important implications for language teachers and learners as well as curriculum developers and syllabus designers. Due to cultural and political reasons, conversational skills of listening and speaking are not adequately considered and the exposure to English is not available in everyday communication and just limited to classroom instruction. This has caused the educational authorities, specifically; those responsible for planning and developing educational programs as well as designing textbook syllabi do not include listening in the course books and school or university curricula. As a result, teachers do not pay much attention to this skill and listening has turned out to be a forgotten skill, in fact, a nightmare never easily reachable for the learners.

All these reasons have caused listening to be the most complicated, challenging and fatigue-inducing skill by itself. Even, in private institutes in Iran which try to develop a simultaneous mastery of skills in the learners and pay enough attention to the listening skill, the problem still exists and has remained unresolved.

In fact, we need a revolution among all the stakeholders in the field and at all levels, that is, our attitudes and teaching methods and strategies should be totally reformed. According to Hamouda (2013) most teachers take listening for granted and believe that it will develop naturally within the process of language learning. What has been ignored by both teachers and learners is that unlike other language skills listening is a mostly cognitive-based skill in which the role of memory, specifically working memory (WM) is very vital. WM has both a storage and processing function in the comprehension process and learners take advantage of different degrees of capacity in these two functions. Many internal, psychological and cognitive features influence on the WM functions. Most importantly, fatigue as a negative internal factor can seriously interfere with the storage and processing functions of memory and thus during listening comprehension it can severely diminish the learners' performance. Therefore, teachers need to move beyond the classical questioning-answering listening methods, teach students suitable listening strategies and make them cognitively and psychologically prepared to encounter the listening experience.

Furthermore, one of the great implications of the current study would be increasing the metacognitive knowledge of the learners about the influential factor of fatigue during listening comprehension and trying to control it. Most of the time in spite of being linguistically well-prepared, learners do not have a good performance and this may be due to the fact that they are not psychologically in an optimal status. This may indicate that most learners do not have the adequate knowledge how to deal with different methods of input presentation and they are not well-informed of the actual problems which take place during their online processing. Knowing the sources of difficulty can help both learners and teachers to modify and adapt their strategies.

There are some suggestions for further research. First of all, due to the importance of the advent of fatigue or listening fatigue as a new construct in the L2 research, doing an experimental study would lead to more promising results. Wessely et al. (1998) has claimed that fatigue is more common in females and in lower socio-economic groups. Therefore, another research

project can be conducted aimed at exploring the relationship between gender and different ethnic groups and the resulting effect on listening performance.

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