

The effect of task characteristics on listening comprehension

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Abstract

This study focused on the effect of two factors of complexity and salience and the mixture of both on listening comprehension. Advanced learners were divided into four separate groups (complex-salience-mixture-control) and each group was tested by different listening tests. Each group received a pre-test, 10 sessions of during-test instructions and a final post-test. The results showed that the mixture group which had two factors of complexity and salience in their tests showed a significant change in their performance from pre to posttest. The difference between the scores of post-test for the *complex* and *salience* groups was somehow significant compared with the pre-test scores, but these scores of the two mentioned groups were not as much significant as were the scores of the *Mix* group.

Introduction

listening is an important language skill to be developed in second language acquisition (SLA) (Dunkel, 1991; Rost, 2001; Vandergrift, 2007). Rost (2001) maintains that "a key difference between more successful and less successful acquirers relates largely to their ability to use listening as a means of acquisition" (p. 94). A considerable body of research has been conducted on listening comprehension tasks in EFL contexts. According to Kurita, (2012) numerous studies have been done on cognitive and linguistic factors, as well as on affective factors on listening comprehension. Although there are a variety of techniques to teach L2 listening comprehension this Cinderella skill (Nunan/1997) is often treated as a passive and receptive skill and mere exposure to the spoken language is considered to be enough for learners to develop their listening skills automatically (Scarcella & Oxford, 1992). Using different tasks and changing the difficulty and clarity of listening activity for language learners may have an effect on mastering this skill (Nunan/1997). Task based learning is based on the idea that if students just listen and do nothing, there will be no guarantee to learning, while having a task in all three stages of doing the listening, (pre/whilst and post listening activities) can give this confidence to students to believe that they have acquired the language*. This study seeks to focus on the second stage of listening, which is "*while listening*". We aim to examine to what extent changing the complexity of the task given to the learners can affect their listening comprehension ability. Moreover, *salience* which refers to

clearness of the listening activity and the presence or the lack of background knowledge about the targeted listening task will be scrutinized.

Review of literature

A few studies have been conducted on using tasks to make listening more objective. Giving different activities to learners before they start listening or in the middle of it can boost the amount of understanding (Nunan/2003).

For a long time, the role of listening comprehension in English teaching programs was neglected. According to Richards (2002), before 1970s listening was hardly appeared in journals. However, this ignored condition of listening changed after Krashen (1985) theorized that comprehensible input which was very fundamental in starting language development. The importance of listening was highlighted with the introduction of Communicative Language Teaching (CLT).

Over the last 20 years, tasks have become a unit of design in a communicative curriculum. They are made to engage learners in realistic communication on the assumption that engagement in communicating meaning leads to implicit learning (Crabbe, 2007). Research on task design attempts to find variables in task design that will lead to second language acquisition processes such as negotiation or noticing (Bygate et al., 2001; Ellis, 2003). Tasks and their components, characteristics, types, and implementation conditions have been the focus of much research (Albert &Kormos, 2004).

The great advantage of tasks is that they let learners engagement in realizing the communicative aims of the semantic resource (Widdowson, 2003) and the most important role for a language task is to allow learners to deal with certain language problems in completing the task (Long, 1985).Nunan (2003) pointed out that task-based language teaching is an approach to design language courses in which the point of departure is not an ordered list of linguistic items, but a collection of tasks. It potentially shows the experiential and humanistic traditions as well as the changing conceptions of language itself.

Task types have recently been focus point of muchresearch. A study by Brown et al. (1985) concludes that output tasks should not rely restrictedly on memory or abilities, and informative titles make comprehension easier if listeners are directed to pay attention to them. Eykyn (1992) studied the effect of four tasks (multiple choice, choose-a-picture, French to English vocabulary lists, and Wh- questions) on the recall protocol of high school learners while watching a real video section. Reviewing the literature, the researchers found no study that shows the role and effect of type of syllabus on the listening skill of L2 learners. This study was triggered bythe goal of filling this gap. The effect of two types of syllabi (structure-based& task-based) on listening skill showed that a very brief amount of them was provided to let the study happen in an appropriate context.

A study by Mahmudi investigated the impact of the type of syllabus (structure-based vs. task-based) on the listening comprehension of two homogeneous classes. The subject of the structure-based group was American Kernel Lesson: (O'Neil et al., 1978), and the second group was taught based on \Expanding Tactics for Listening: intermediate (Richards, 2005). Contrary to the structure-based group, the task-based one showed considerable improvement in the post-test performance.

A present- day listening lesson is likely to have these stages, Albert, A. and Kormos, J. (2004). It has pre-listening for context and motivation, extensive reading to design the situation, pre-set questions and tasks, extensive listening, reviewing the questions and finally inferring new vocabularies and testing new grammars. Yet, the method, complexity and salience of these stages have not been studied and more investigation is needed to find ways to improve listening comprehension. These changes have made 3 developments in listening skill; firstly, listening is a skill which has priority over the details of language content. Secondly, one is that it has tried to match the listening which students get in a class to the listening activities in the real world. Thirdly, learners' motivation has found its place in listening task to encourage them to develop expectation about what they will hear. Although teaching listening has become more sensitive to learners' need, it still follows the same procedure for the content and form. In order to get a good result in listening, it is necessary to provide micro-listening exercises which can be presented as a task in different level of complexity and salience (Field, 1983).

A few studies have been done in the field of listening proficiency about using task to make them more objective. Giving different activities to learners to do before they start listening or in the middle of it can boost the amount of understanding and producing language speeches. Complexity of the listening task and its clarity and salience is the matter which should be tested to find a clear answer to the question that how much difficulty in activities of listening and clearness of them can have an effect in elevating and fortifying learners listening comprehension.

Related researches on task complexity

Foster & Skehan (1999) conducted a study on the effect of source of planning and its effect on task-based performance. Their study showed that the teacher can have significant effects on accuracy while planning can lead to more complexity, fluency. Group-based planning did not make performance different from that of the control group. Finally, there was little effect on performance as a result of the language versus content planning condition. Planning and on-line planning was equally grammatically complex. Moreover, the on-line planning led to more accurate language than pre-task planning.

Iwashita, et al. (2001) made an attempt to find out that whether characteristics and performance conditions (involving different levels of cognitive demand) have any connection with different levels of fluency, complexity, or accuracy in students' responses. They were required to produce oral narratives from picturestrips that had been designed to differ in their cognitive demands. These four dimensions of task were considered: adequacy; immediacy,

perspective and planning time. No significant effect for any of the measures (accuracy, fluency and complexity) was found, except an effect for accuracy in the immediacy dimension.

Yuan & Ellis (2003) operationalized planning at three levels: no planning, pre-task planning in which the students had 10 minutes to plan, and on-line planning where they had enough time to narrate the story. The results showed that pre-task planning fortified grammatical complexity, lexical variation and fluency while on-line planning positively influenced accuracy and complexity of grammar. However, pre-task planning led to more fluent and lexically diverse language than on-line planning.

Ishikawa (2006) tested the effect of task complexity and language proficiency on speaking performance. Task complexity was performed along here-and-now / there-and-then dimension. The results indicated that increasing task complexity for advance learners had positive effects on accuracy, structural complexity and fluency, had negative effects on lexical complexity. Increasing task complexity for intermediate learners had positive effects on complexity of lexicon and structure, accuracy and fluency. He also investigated the effects of manipulating task demands of intentional reasoning on L2 speech performance. Three types of tasks were used: simple reasoning task, complex reasoning task, and no reasoning task. The results indicated that intentional reasoning had positive effects on syntactic as well as lexical complexity and accuracy, but it had a negative effect on fluency.

Gilbert (2007) studied the effects of performing cognitive complexity of L2 oral tasks on self-repair behavior during monologic production. Using three different types of tasks, the narrative task was manipulated along here-and-now / there-and-then, an instruction task was performed along few elements / many element and decision-making task was manipulated along with / without reasoning demands. The results showed the effect of task complexity on behavior based on the type of the task, with different behaviors among the three task types. In this study similar behavior was observed based on simple and complex performance. In performing simple tasks students made more errors and corrected more frequently. Besides, learners made a large proportion of errors in the oral task than in instruction-giving task and decision-making task. So, the narrative task produced the highest amount of self-repair.

Kuiken and Vedder (2007) studied the effects of cognitive task complexity on written production for accuracy and lexical variation by implementing specific measures of writing proficiency considering the type of errors the students made and the frequency of the words used by them. Task complexity was manipulated along errors and words frequency. The results indicated that both students of Italian and French had fewer errors in the complex task of lexicon. However, the students of French made more errors in complex tasks than in simple tasks. Also, the Italian students used more words with high frequency in complex task while the French students used more infrequent words in complex task.

Michel, et al. (2007) studied the impact of changes in task complexity, few elements / many elements, and task condition on L2 oral performance. The results showed that increasing task complexity promoted accuracy but had a negative effect on fluency and linguistic

complexity to some extent. Dialogic tasks were more accurate and fluent but less complex output. Besides, in the monologic condition task complexity increased accuracy.

Rahimpour (2007) found that there-and-then task (complex task) made more accuracy while here-and-now task (simple task) caused more complexity. In terms of fluency simple tasks led to more fluency than the complex task.

Gilbert et al. (2009) studied the effects of using cognitive complexity on different task types and its impact on learners' interaction during oral performance. The result of the study based on decision-making tasks showed no clear differences between accuracy of the learners' performance on the two tasks. Gilbert and his colleagues used the result for the nature of the decision-making task types.

Kim (2009) conducted a study on the effects of task complexity on learner-learner interaction of students in different levels of proficiency. Task complexity was held along with / without reasoning demands and few / many elements. Tasks were two-way ones which need interaction among participants. The findings of the study clarified that task types and learner proficiency are important factors which have an effect on task complexity in L2 learning opportunities.

Yousefi (2009) tested the effect of task complexity on L2 learners' uptake. Two versions of simple and complex tasks were used as a decision-making type. The results of the study showed that the rate and achieved success in complex task were higher than its simpler version comparatively.

Ong and Zhang (2010) investigated the effects of task complexity on fluency and lexical complexity of 108 EFL students for writing. Task complexity was performed using three factors of time planning, ideas provision and, and the availability of drafts. The results of the study manifested that: 1. increasing task complexity based on planning time made greater fluency. 2. Task complexity increasing through the provision of ideas produced higher lexical complexity without any effects on fluency. 3. increasing task complexity through the draft availability makes no clear differences in fluency, and lexical complexity.

Ahmadian & Tavakoli (2011) studied the effects of using online planning and task repetition simultaneously on oral performance of L2 learners as a matter of three linguistic areas of accuracy, fluency, and complexity. It was indicated that students in online planning groups spent more task completion than in control groups, and the differences were significant. This study provides more evidence on the limited and selective nature of attention capacity in which L2 learners using more time for task completion have produced more accurate language than those performing the task under time limitation. Moreover, the findings of the study also showed a high level of positive effect on complexity in EFL oral production.

Blau (1990) did a study on the effect of simplifying syntax or inserting surface clues for more complex sentences on L2 listening comprehension but found no effect. These results show that changing sentence structure (in terms of simplifying syntax and including cues) of aural scripts does not have an effect on second language learners' listening comprehension. Pica Young and Doughty (1987) investigated the effect of modifying syntax on listening comprehension. The results show that participants listening to scripts with lower syntactic

complexity did not perform better than those who were given unmodified scripts and the opportunity to interact with the speaker.

From a psycholinguistic point of view, the ability to comprehend a language is known as a complex and active skill which consists many different mental processes (Taylor, 1981). According to Byrnes (1984, p. 318), listening comprehension can be considered as a “highly-complex problem-solving activity” which consists of a set of different sub-skills. While task-based activities in language provide nice opportunities for L2 learners, simultaneously they aim to create the conditions for acquisition and further L2 learning. Listening consists of real-time processing without going back to previous sections that the listener may have missed (Buck, 2001; Flowerdew, 1994). Moreover, as most listening involves full control of receiving speech, control over the speed of delivery for listeners varies much more widely (Osada, 2004). Besides, in spoken language comprehension, word boundaries must be inferred from a large number of lexical and phonological cues (e.g., Cutler, Dahan, & Van Donselaar, 1997). These factors are basic qualities of listening. However, there are other factors which are effective such as a fast speech rate, presence of infrequent vocabulary, task complexity, and task salience. In the late 1960s and early 1970s listening comprehension lessons had a consistent format. It included: pre-teaching new vocabularies, extensive listening which is questions about general context, intensive listening which are detailed questions, testing vocabularies and grammar and use of a play and repeat or recall words. Over the past 25 years there have been some advances in revising and modifying the method and stages of doing listening tasks for learners.

Among three aspects of task-based pedagogy, to Robinson (2001a) a task complexity is the task dependent and proactively manipulated cognitive demand of tasks. Robinson (2001) believes different criteria for task complexity; provide a basis for deciding about sequencing tasks in a task-based syllabus as well as a framework for considering the effects of increasing L2 task complexity on production, comprehension and learning. In this study an attempt has been made to study the effect of difficulty and salience of tasks on listening comprehension of advance English learners.

Several studies have investigated the effect of task complexity on different aspects of linguistic performance at different levels of L2 proficiency (e.g., Robinson 1995; Robinson 2001; Skehan & Foster 1999; Rahimpour 1997; Yuan & Ellis 2003; Gilabert 2005). One dimension of the present study attempted to examine the effects of task complexity on advanced EFL learners' listening comprehension. A well-known model of task complexity was put to the test, i.e. the ‘Triadic componential Framework’ known as ‘Cognition Hypothesis’ proposed by Robinson (2001). Cognition hypothesis claims that if dimensions of cognitive task complexity belong to different attentional resource pools (e.g., memory and attention), increases task complexity along the so-called resource directing variables (e.g., +/- few elements, +/- Here and Now, +/- reasoning demand) lead to higher complexity and greater accuracy of learner's output.

The two most influential models of task complexity are the Limited Attentional Capacity Model (Skehan, 1998; Skehan& Foster 1999, 2001) and Triadic Componential Framework (Robinson 2001a, 2001b, 2003). The Limited Attentional Capacity Model is that attentional resources are limited and that increasing the complexity of tasks reduces a pool of general available attentional capacity and also it's notion founded on theories of 'working memory'. The major claim of this model is that an increase in cognitive task complexity will make learners pay primary attention to the content of the task. In this model three dimensions of 'task complexity are distinguished (Skehan 1998, Skehan& Foster 1999, 2001): 'code complexity' which concerned with the linguistic of task,' cognitive complexity' concerns to task content, and' communicative stress' refers to performance conditions.

Robinson held a different view on the effect of cognitive task complexity on linguistic output(1996, 2001a, 2001b, 2003). He proposes that input may be processed more deeply and elaborately if there are increases in the cognitive demands of tasks. This model distinguishing three dimensions: task complexityrefers to two types of cognitive task features, resource-directing and resource-dispersing variables according to Skehan and Foster, task conditionsrefer to communicative stress category, and task difficultya dimension which is lacking in the Limited Attentional Capacity Model, comprises learners" perceptions of the demands made by the task and is determined by the abilities (intelligence, working memory, language aptitude) and affective responses (anxiety, motivation, confidence) that learners bring to the task. In the following some criteria of task complexity by Robinson,Prabhu and Skehanare listed in tables.

Table 1.1.CRITERIA SUGGESTED BY PRABHU (1987) TO DETERMINE TASK COMPLEXITY

–	Degree of difficulty
+	
<i>Few elements</i>	AMOUNT OF INFORMATION
<i>Many elements</i>	AMOUNT OF REASONING
<i>Few steps</i>	DEGREE OF PRECISION
<i>Many steps</i>	DEGREE OF FAMILIARITY
<i>Precise terms not needed</i>	DEGREE OF ABSTRACTNESS
<i>Precise terms needed</i>	
<i>Unfamiliar</i>	
<i>Familiar</i>	
<i>Objects and actions</i>	
<i>Concepts</i>	

Robinson (2001) has presented some factors which have an influence on the complexity of tasks from cognitive, interactive and difficulty point of view. In case of task complexity he is in agreement with Prabhu (1987).

Table 1.2.. ROBINSON’S MODEL OF TASK COMPLEXITY, BASED ON ROBINSON (2001A; 2001B; 2003A)

Cognitive factors	Interactive factors	Difficulty factors
<p>Task complexity a) Resource directing e.g., +/- few elements +/- Here-and-Now +/- No reasoning demand b) Resource dispersing e.g., +/- planning +/- Single task +/- Prior knowledge</p>	<p>Task conditions a) participation variables e.g., one way/two way convergent/divergent Open/closed b) participant variables e.g., gender Familiarity Power/solidarity</p>	<p>Task difficulty a) affective variables e.g., motivation anxiety confidence b) ability variables e.g., aptitude proficiency intelligence</p>

The following table elaborates the criteria for task complexity, mentioned by Robinson (2001) and clarifies how different factors can cause the task to get complex.

Table 1.3. TASK COMPLEXITY CONDITIONS ADAPTED FROM SKEHAN (1996; 1998) AND ROBINSON (2001A5) MODELS OF TASK COMPLEXITY

Dimensions	Complex/+	Simple/-
Planning time	Not having time to look at the listening items before listening to the tasks	Having time to look at the listening items before listening to the tasks
Perspective	Answering the task items after listening to task with third person point of view	Answering the task items after listening to task with first person point of view
Prior knowledge	Listening to the task and answering the task items without prior knowledge	Reading related written prior knowledge before listening and answering the task

The following table describes the stages of learning process from task demands to performance based on resource directing. It shows the relationship between cognitive sources and learning mechanisms and their effects on performance.

Table 1.4. Task complexity and language learning along resource-directing (not resource

Task Performance demands effects	Cognitive resources	Learning mechanisms	
more cognitively —> incorporation of input demanding tasks modification of output, more uptake of salient more stretching and syntacticization of interlanguage	more attention—> to input /output and noticing/ rehears in memory	more rule and —> instance learning/ stage shifts/ proceduralization/ cue strengthening	more more i.e., input,

dispersing) dimensions (from Robinson, 2001a)

Related researches on task Salience

Salience depends on the accessibility of a category within a person's cognitive repertoire and on the fit of the category to the situation (Oakes, 1987). A category is more likely to be salient if the individual is predisposed to perceive that category as relevant (accessibility) and if both the category and the situation match the individual's expectations and if reality matches these expectations (Oakes et al., 1991). Accessibility describes the perceiver's readiness to accept a category (Oakes, 1987). Fit refers to the match between category specifications and the stimulus reality (Turner, 1999). Salience can be increased for example if a category is especially mentioned (Hogg and Turner, 1985), if the category is set into a context of relevant and other

categories (Turner et al., 1987, p. 112ff), and especially if the category is contextualized by conflict with other groups (Wagner and Ward, 1993).

In one study, the literal salience assumption was tested in a Cross-modal lexical priming experiment on advanced Polish learners of English. The experiment focused on visual aims

related to literal meanings of idioms constituent words than for targets which are related to the metaphoric interpretation of the idiomatic phrase. This effect clarifies if the stimulus sentence contained a literal or metaphorical idiom.

Based on salience, the meanings will be comprehended as the meanings which are activated strongly in the course of language processing, because their representations in the mental lexicon are much more strongly encoded as a matter of length of storage and completeness of representation than those of the less salient meanings. Salience is a psycho-perceptual impact which is related to a number of psycho-perceptual properties. First prosodic prominence which are the words perceptually salient, have been noticed by the listener. Words which are important are, perceptually salient. Not all words will be assumed as being prosodically prominent. In an abstract representation called *Information Structure*. Information Structure can be merged into a set of assumptions about the sentences process in discourse, and memory functions. Information Structure is, therefore, a grammatical system with significant processing impacts, called the psycho-perceptual effect of finding some part of an utterance salient.

The salience of an event is also defined as its distance from a null-event. This semantic distortion can be shown to be equal to the relative entropy between the distributions of the output actions. The salience of an event is then the unique positive measure of how much information that event supplies about the variable of suitable machine responses. Salience refers to the most probable interpretations of a word unit. The most salient meaning of a special word, expression or sentence is prototypical interpretation or the most determined, familiar and frequent word which happens. Salience is based on previous knowledge and experience, so; it is a function of degree of familiarity. Salience is active and ready to change if, environments, society, use and speakers change.

Different salience is the result of different experiences, and second language acquisition differs from first language one. As a result, whatever salient for one person who belongs to the target language community will not essentially be salient for the 'newcomers of second language. When using another language, learners do two activities. First, they focus on previous knowledge which is the knowledge of the first language and the socio-cultural background knowledge which language 1 is based on. Second, they also give priority to certain meanings they face in the target language. So the meaning appeared in the mind of a second language learner as the most salient meaning of a word unit is the result of experience with two languages and cultures. Therefore, it may considerably differ from what the native speakers of that language think of as the most salient meaning of that special lexical item or expression. This might cause misunderstanding in communication.

What gets salient in the mind depends on, familiarity, frequency and conventions of encounters (Giora, 2003), e.g. linguistic and socio-cultural experience

Salient meaning refers to standard context in which the lexical item occurs repeatedly, so, we build our expectations about what may happen, and our ability to understand and predict how

the world around us works. (Violi, 2000). The more we confront with this meaning, the more familiar the situation it occurs becomes. Factors like frequency or familiarity play a critical role in shaping the status of probable meanings and determine which one gets the most important possible meanings of a lexical unit. The most salient meaning is not always the literal meaning. Giora (2003: 33) defines 'literal meaning' as what is denoted by each single word, as well as to what is said by the compositional meaning of the sentence made up of these words intended non figuratively.' The most salient meaning(s) of a lexical unit can be either literal or idiomatic or sometimes both.

Method

Participants

In this study, 60 male and female advanced EFL learners aged between 17 and 30 who have studied English for nearly six years were recruited. There are 34 boys and 26 girls in this research who study English in Tehran Institute of Technology (MFT) in Tehran and Hamadan branch. Selection was based on a pass score of an OPT (Oxford Placement Test) exam (80 out of 100) and justification of institutes which certified the advance level for them based on the advanced level of the book. All these learners studied English at least for 3 years and experienced different language classes. Along with the OPT (Oxford Placement Test), it has been attempted to consider all necessary factors to make them homogenous as much as possible in their listening, speaking and grammar proficiency and knowledge. They were divided into 4 groups of control, complex, salience and mix with different tasks and tests.

Materials and Instruments

Participants were tested in 4 different groups (one control and three experimental ones) and two types of listening tests were implemented. *Multiple choice* and *sentence completion* listening questions were chosen from two books, *TOEFL Test Preparation Kit* by Educational Testing Service (ETS) (2003) and *Advance listening and Speaking/CAE* by Kathy Gude (1999). The tests involved one pre-test at the beginning of the semester and one post-test at the end. Both pre and posttests had two types of questions. The 10 other *while* tests were also chosen from the mentioned books to test students during the semester to see the effect of giving these types of listening tests on task complexity and salience. In multiple-choice tests, both control and experimental groups had eight questions, but in sentence completion tests, the experimental group had ten questions, while the control one had eight questions.

This study focused on advanced learners of English language. In order to make the participants homogeneous, selecting the participants from advanced language learners of Tehran institute of technology was accompanied with the OPT (Oxford Placement Test) which was given to them to increase homogeneity in participants' level. The OPT contains two sections of listening and grammar tests, (each one 100 questions). The questions in both sections were based on easy to difficult level of listening proficiency and grammatical

structures. The participants who answered over 80 out of one hundred questions of either section were selected as the subjects for the study.

Procedure

All participants were assigned to four groups. One control group received standard questions and three experimental ones were given modified questions. The data were collected in advanced English classes of Tehran Institute of Technology (FMT). Data collection was done during twelve sessions. All the four groups of participants had pretest, ten main tests and a final posttest for both types of multiple-choice and sentence-completion questions. In order to qualify students as an advanced learners, the OPT (Oxford Placement Test) exam was run. Besides, the participants were selected from advanced classes of the MFT institutes in Tehran and Hamadan. After doing a level adaptation and confirming all participants as advanced learners, they were divided into 4 groups. In the pretest exam, all students were exposed to the same questions, (multiple choice and sentence completion). They answered eight multiple choice and eight sentence completion questions. Then, these four groups were given ten multiple choice and sentence completion tests, but in different conditions with different methods of performance.

As this research aims to indicate the effect of task complexity, salience and combination of both on listening comprehensions, participants were divided into four groups; the first group was named *Control* who experienced no changes in the form and procedure of answering the questions. The second group was named *Complex*, because their task of listening just became complex and its saliency did not change. The third group was called *Salience*, in which the participants just experienced some changes in the salience and clarity of the task, not its complexity, and finally the fourth group was called *Mix*, as they were tested on the questions with different implemented features of task complexity and salience simultaneously. The students of each group took one test every week. Along with the pretest and posttest; the whole method project took three months and a half.

The multiple-choice questions for the *Control* group were exactly standard questions without any changes. They were given to the students and they had two minutes to check the stem and options of eight questions; besides, they were given the meaning of the critical words, they got familiar with the task and were informed what information they were required to present, they also were given background knowledge about the content by the teacher. As the students had background knowledge, time, meaning of complex words and they were familiar with the task, so it was not complex, and as the task was clear and they knew what type of questions they were given and what they were supposed to do about the listening in advance, so the task was salient as well.

In sentence completion questions, they were given the sentences in advance, the summary of what they were supposed to listen to was written beside the questions along with the meaning of difficult words. There were eight sentences and each one had one gap to be completed.

Students were given time to check the sentences and study the task and get familiar with the questions. This way, the required activities were so clear and salient for them.

In the second group (*Complex*) just the focus of the study was only on task complexity in which the background knowledge, time, number of items, critical words and familiarity with the topic of the listening were targeted. Contrary to the Mix group in which student did not even see the questions until the listening was over, here the questions were given to the testers just a few seconds before the listening started, but they still had no time to check the questions in advance, furthermore; they did not know the meaning of difficult words and had no background knowledge about the topic of the listening. The task was salient since they knew what they were asked to do and the required information was clear and salient.

In sentence completion questions, the condition was similar to the multiple-choice one. The students received the questions just before the listening started, but the task was complex because of the mentioned factors of task complexity. The summary was deleted and there were twelve gaps to fill. In addition, students were not familiar with the topic of the listening and had no time to check the questions. But, as they had the questions while listening, it was salient for them what missing information they were required to listen.

The third group of participants (*salient*) also experienced the different method of performing the task of listening. In multiple-choice questions, in order to removing salience from the task, students were not supposed to see the questions until the end of playing the listening. But for this group the task was not complex as the teacher gave students a summary of the topic of listening some minutes before the listening started. In addition, the teacher wrote some critical words related to the listening on the board and elaborated on their meaning. Students also got some background information about the listening task. But contrary to the *complex* group, who received the questions in advance before the listening, here the participants of *the Salience* group did not have a chance to see the questions and get to know what they must do about the listening activity. It was not salient for them what they had to do after the listening finished.

In sentence-completion questions, the exact activities related to removing the complexity of the task were done such as giving the participants a brief summary, plus the meaning of unknown words and making them familiar with the topic. But still they had no idea what gaps they had to fill, and what information they were required to present by the sentences.

In the fourth group (*Mix*), the condition was different. Both task complexity and salience features were inserted. The questions were not given to the participants, they were asked to listen and take notes on a piece of paper, they had no idea what the listening was about, they were not given time to do anything, they had no background knowledge about the listening, the task was not salient for them and they did not know what they would be asked to do after the listening, so they had no prior information, no time, no familiarity with the task and no idea what to do after the listening. In addition, after the listening was played, the questions were given to the students, but they only had the options not the stem of the questions, then

the speaker read the questions and students spontaneously understood what answers they were expected to present. The task was *complex* as they had no knowledge, time and familiarity about the topic of the listening and it was not *salient* as they did not know what activities they were supposed to do about the listening task and what question from what part of that listening they would be asked.

In sentence-completion questions, the same procedure was followed. Like the multiple-choice tests, the testers did not see the questions in advanced, they just had paper to take notes, but in control group, students had ten sentences to fill. In the Mix group, students had twelve gaps to fill and were not given instruction as to what to do. They also had no prior knowledge or time about the questions and were not familiar with the topic. Besides, they did not have a chance to know the meaning of complex words. As they had no idea what they should have done or what type of information to answer, the task was not salient either.

After administrating the pretest and ten sessions of while tests for both multiple-choice and sentence-completion tests, the posttest questions were given to the participants. In posttest, the standard tests with mediocre level of complexity and salience were given to the testees. All different forms of task complexity and salience which were implemented for the three experimental groups changed into their original standard forms which were routine in most listening activities. Then the results of participants' performance were analyzed.

Result

The first step to answer the research questions was to calculate the descriptive statistics for the related conditions, and the second step was to submit the data to repeated measures ANOVAs to determine if there were any significant differences between the conditions specified for each of these hypotheses. The following represents the steps of screening the data against each null hypothesis.

In this study one pre-test, ten while- tests or treatment and one final post-test were given to every of the 60 participants . After giving the tests and correcting them, the true answers of each participant in their own group was calculated. The data collected from all four groups (Complex-Salience-Mix-Control) were computed by SPSS software.

One-way ANOVA was used in order to analyze the variance of these four groups. Factors which were chosen were complexity-saliency-mix and control. The one-way ANOVA was measured for the pre-tests of the four groups of participants and the result was as follows:

Table.1.5. DESCRIPTIVE PRE-TEST (COMPLEX-SALIENCE-MIX-CONTROL)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Complex	15	7.00	.000	.000	7.05	7.00	6	8
Salience	15	7.00	.000	.000	7.00	7.00	7	9
Mix	15	8.00	1.000	.000	7.00	8.00	7	10
Control	15	7.00	1.000	.000	6.00	8.00	6	12
Total	60	7.00	1.059	.000	7.00	8.06	6	12

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.000	3	56	.086

ANOVA

preComplexSalienceMixControl

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.000	3	2.000	2.000	.088
Within Groups	58.000	56	1.052		
Total	66.000	59			

A one way ANOVA was conducted to explore the impact of complexity and salience and the mixture of them on advanced learners' listening comprehension. Subjects were divided into four groups. There was no significant difference in the scores for the four groups. There was absolutely no difference in mean scores between the groups. As the significance of both, the

test of homogeneity of variance and ANOVA was more than 0.05 which showed that there was no significant difference among the four groups in the pre-test stage.

Test of homogeneity of variance was held and no significant difference was seen. As all participants were advanced language learners and their proficiency in listening skill was tested by the oxford placement test (OPT) and all of them had the mean score between 70 and 80 from the whole score of 100, so, no significant difference was expected to be observed among the variance of these four groups of subjects in the pre-test.

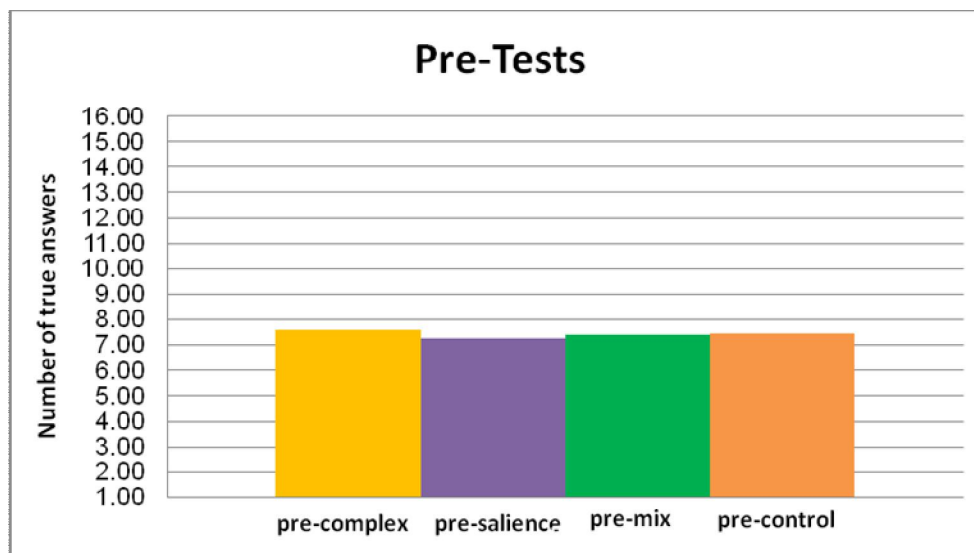


FIGURE.1.1. BAR GRAPH VARIANCE OF PRE-TESTS

Based on the information gathered in pre-tests these two bar and line graphs to show the differences among four tests in detail according to the number of correct answers and the homogeneity which was obvious among four groups of participants. The difference among them is not significant.

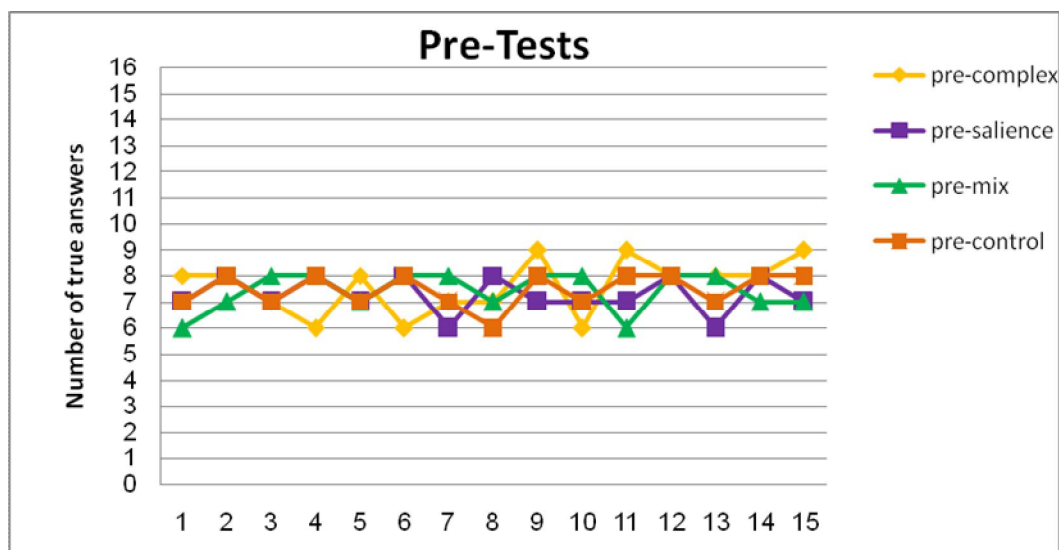


FIGURE.1.2. LINE GRAPH VARIANCE OF PRE-TESTS

The line graph above illustrates the homogeneity in the correct answers among four groups of participants in the pre-test listening questions. As the figure shows, all the sixty participants in four groups have answered the questions almost equally, as they were selected based on the result of OPT exam.

After getting sure about the homogeneity of participants proven by the one-way ANOVA in pre-test, the data resulted in post-tests were analyzed. Like pre-test, participants were examined by the same test which was similar to pre-test. The format, planning and the number of questions in this test were similar to pre-test exam. The result of their tests was analyzed and like the pre-test, the one-way ANOVA was done over the four groups results in the post-test exam. The tables related to this analysis are as follow.

Table.1.6. DESCRIPTIVE POST-TEST (COMPLEX-SALIENC-MCONTROL)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
comple	15	6.0000	2.00000	.00000	5.0000	8.0000	4.00	13.00
x								
salienc	15	7.0000	2.00000	.00000	5.0000	8.0000	4.00	12.00
e								
mix	15	10.0000	1.00000	.00000	9.0000	11.0000	8.00	13.00
control	15	8.0667	.00000	.00000	7.0000	8.0000	6.00	9.00
Total	60	8.0000	2.00000	.00000	7.0000	8.0000	4.00	13.00

Null hypothesis number 1

The first research question of this study focused on whether there is a relation between changing the level of task complexity in listening activities and improving or weakening the listening proficiency of advanced EFL learners. The hypothesis stated that changing the complexity of the listening task may improve the listening skills of advanced learners.

By complexity it has been tried to involve some factors in the format of the test to see if they can have an impact on the listening comprehension of the learners. Based on Robinson's (2001), and Skehan's(1996), model of task complexity, the criteria considered to make the task complex were time planning in which students were not given any time to check the questions at first, background knowledge that was not given to students about the topic of the listening, so students could not activate their background knowledge about the listening task, and the number of elements which had changed to make the task more complex. The One-way ANOVA was performed on the post-test results of the four groups of *Complex*, *salience*, *mix* and *control*.

ANOVA

POST TEST (complex-salience-mix-control)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	142.000	3	47.000	12.000	.000
Within Groups	212.000	56	3.000		
Total	354.000	59			

Tests of homogeneity of variances and Equality of Means were performed for all four groups of subjects. Between groups mean square of 47.000 with F 12.000 showed significant difference between groups .Sig .000 showed that there was somehow significant relation between the complexity and changing listening comprehension condition. Therefore, the first null hypothesis was admitted.

Null hypothesis number 2

The second null hypothesis of this study tested the effect of saliency (removing the clarity of the task) on the performance of learners and their listening Proficiency. Like the complexity hypothesis, there was a significant difference in inserting the factor of saliency in the task given to the participants. The salience group showed difference in comparison with the pre-test after running the one-way ANOVA and the mean difference is significant at the 0.05 level with two other groups of Complex and Control, so the second null hypothesis was

admitted as well, because the relation between the salience and Mix group was significant as the mean difference was -3.00000.

Null hypothesis number 3

The third null hypothesis claimed that mixing both factors of complexity and salience in the listening task will lead to increasing listening comprehension and proficiency. Making the task complex and salience simultaneously was the third hypothesis which was tested on the last group of participants. One way analysis of variance was conducted among four groups of participants with three independent variables (complexity, salience and the mixture of both variables) to explore the impact of mixing complexity and salience features of the task on advanced EFL learners' listening comprehension. Participants were divided into four groups (complex-salience-Mix-control). There was statistically a significant difference at the $p < .05$ level in scores of the Mix group with 3 other groups. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The effect size, calculated using eta squared (Eta squared = sum of squares between groups divided by the Total sum of square) was .03. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for group *mix* was significantly different from group *complex*, *salience* and *control*. The difference in mean score of Mix group is significant with all three other groups mean scores, special control group with the significance of .03. Post-hoc comparisons using the Games- Howell indicated that the mean score for group mix is different from the other three groups and the mean difference is significant at the 0.05 level. The following is the graphs which have been designed to show the exact difference in the outcome of the posttests of all four groups. As the graph illustrates, the answers of the Mix group among the other three groups of participants were more as eleven questions had been answered by learners in average.

Post Hoc Tests

Dependent Variable: postComplexSalienceMixControl **Multiple Comparisons**

	(I) factor	(J) factor	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Comple x	salience	.00000	.00000	.000	-2.0842	1.0000
		mix	-3.00000*	.00000	.000	-5.0000	-1.0000
	Salience	control	-1.00000	.00000	.000	-3.0000	.0000
		comple x	.00000	.00000	.000	-1.0000	2.0842

Games - Howel 1	Mix	mix	-3.00000*	.00000	.000	-5.0000	-1.0000
		control	-1.06667	.00000	.000	-2.0000	.0000
		comple	3.00000*	.00000	.000	1.0000	5.0000
	Control	x					
		salience	3.00000*	.00000	.000	1.0000	5.0000
		control	2.00000*	.00000	.003	.0000	4.0000
	Comple	comple	1.00000	.00000	.000	.0000	3.0000
		x					
		salience	1.06667	.00000	.000	.0000	2.0000
	Salienc	mix	-2.00000*	.00000	.003	-4.0000	.0000
		salience	.00000	.00000	.000	-2.0000	2.0000
		mix	-3.00000*	.00000	.000	-6.0084	-1.0000
	Control	control	-1.00000	.00000	.000	-3.0000	.0000
		comple	.00000	.00000	.000	-2.0000	2.0000
		x					
	Mix	mix	-3.00000*	.00000	.000	-5.0000	-1.0000
		control	-1.06667	.00000	.000	-2.0000	.0000
		comple	3.00000*	.00000	.000	1.0000	6.0084
Control	x						
	salience	3.00000*	.00000	.000	1.0000	5.0000	
	control	2.00000*	.00000	.000	1.0000	3.0000	
Control	comple	1.00000	.00000	.000	.0000	3.0000	
	x						
	salience	1.06667	.00000	.000	.0000	2.0000	
		mix	-2.00000*	.00000	.000	-3.0000	-1.0000

*. The mean difference is significant at the 0.05 level.

Posttest(ComplexSaliencMixControl

	factor	N	Subset for alpha = 0.05	
			1	2
TukeyHSD ^a	complex	15	6.0000	
	salienc	15	7.0000	
	control	15	8.0667	
	mix	15		10.0000
	Sig.		.000	1.000

Means for groups in homogeneous subsets are displayed.

Harmonic Mean Sample Size = 15,000

Generally, among all four groups of subjects, the scores of Mix group which their questions had the features of both complexity and saliency showed a significant difference with all three other groups. It seemed a little peculiar for the learners to listen to something without having any background knowledge, time, familiarity with the topic of the listening or any knowledge about the type of the questions or the task which they are asked to answer. But repeating the tests during the treatment period helped the participants to find mastery over conducting this type of listening activity .As nothing was given to the subjects beforehand and they just had a permission to listen and take notes, they found it more helpful in concentrating on the task and listening comparing to other groups who were exposed to the listening text and questions in advance.

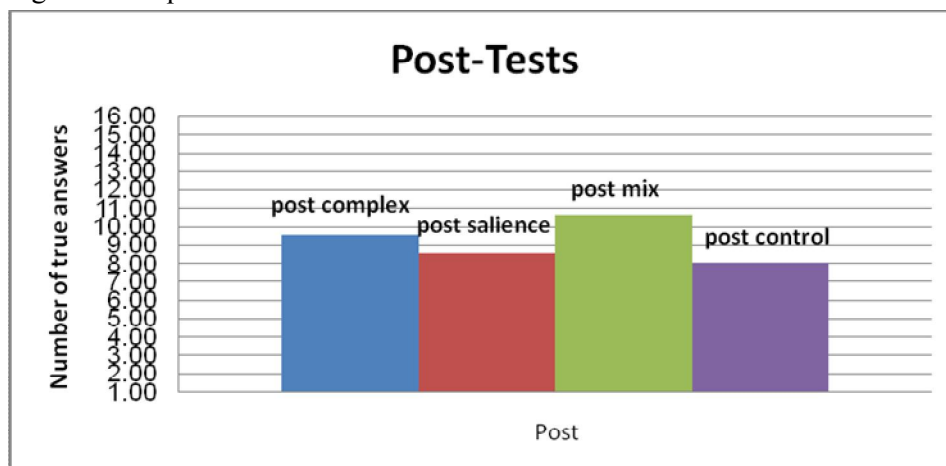


FIGURE.1.3. BAR GRAPH VARIANCE OF POST-TESTS

The answers to the post-test questions between the complex and the salience groups were nearly the same and the average number of correct responses is between eight and nine. The Mix group which experienced the combination of complexity and saliency factors had the highest average number of true answers which is nearly 11 correct answers.

Table.1.7. DESCRIPTIVE DIFFERENCE (COMPLEX-SALIENCE-MIX-CONTROL)

N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	Minimum	Maximum
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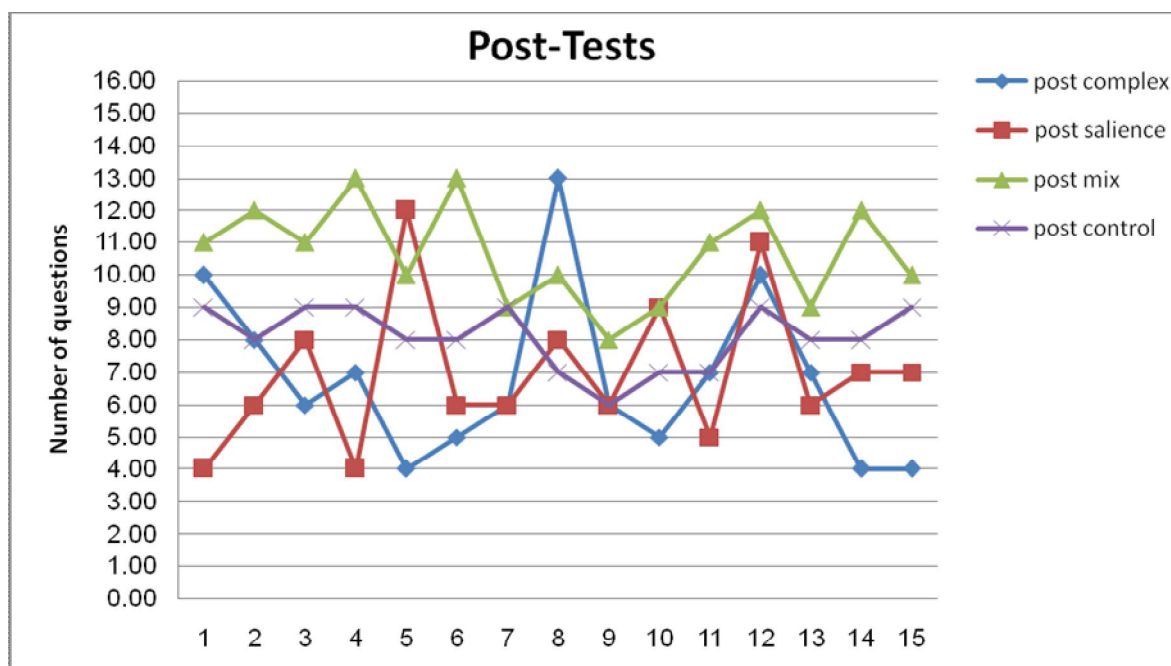


FIGURE.1.4. LINE GRAPH VARIANCE OF POST-TEST

Post Hoc Tests

Difference (complex, salience, mix, control) Multiple Comparisons								
	salience	(I) factor	(J) factor	Mean	Std. Error	Sig.	95% Confidence Interval	
	mix			Difference			Lower Bound	Upper Bound
	control			(I-J)				
Tukey HSD		complex	salience	.00000	.00000	.000	-2.0000	1.0000

In this line graph the procedure of answering the questions by the four groups is illustrated. All four groups experience a state of fluctuation in giving the correct answers to the given questions. As it is clear, the Mix group is above the other three groups by the fluctuation of correct answers from 8 to 13 correct answers.

As the result of computing a One-way ANOVA shows, after subtracting the scores of each group in p acquired scores in Post-tests, it was observed that there was a significant difference in the mean score c the sig ANOVA is less than 0.05, so it proves that the significance is meaningful.

ANOVA
DiffComplexSalienceMixControl

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	159.000	3	53.000	12.000	.000
Within Groups	232.000	56	4.000		
Total	392.000	59			

	mix	-4.06667*	.00000	.000	-6.0358	-2.0976
	control	.00000	.00000	.000	-2.0000	1.0000
	complex	.00000	.00000	.000	-1.0000	2.0000
salience	mix	-3.00000*	.00000	.000	-5.0000	-1.0000
	control	.00000	.00000	.000	-2.0000	1.0000
	complex	4.06667*	.00000	.000	2.0976	6.0358
mix	salience	3.00000*	.00000	.000	1.0000	5.0000
	control	3.00000*	.00000	.000	1.0000	5.0000
	complex	.00000	.00000	.000	-1.0000	2.0000
control	salience	.00000	.00000	.000	-1.0000	2.0000
	mix	-3.00000*	.00000	.000	-5.0000	-1.0000
	salience	.00000	.00000	.000	-2.0000	2.0000
complex	mix	-4.06667*	.00000	.000	-6.0000	-1.0000
	control	.00000	.00000	.000	-3.0000	1.0000
	complex	.00000	.00000	.000	-2.0000	2.0000
salience	mix	-3.00000*	.00000	.000	-5.0000	-1.0000
	control	.00000	.00000	.000	-2.0000	1.0000
	complex	4.06667*	.00000	.000	1.0000	6.0000
mix	salience	3.00000*	.00000	.000	1.0000	5.0000
	control	3.00000*	.00000	.000	2.0237	4.0000
	complex	.00000	.00000	.000	-1.0000	3.0000
control	salience	.00000	.00000	.000	-1.0000	2.0000
	mix	-3.00000*	.00000	.000	-4.0000	-2.0237

*. The mean difference is significant at the 0.05 level.

The difference between posttest and pre-test was computed and the one-way ANOVA was calculated. The scores of all four groups of pre-tests were subtracted from the scores of four groups of posttests. The result was put in to one-way ANOVA and the post-Hoc results were analyzed. As the different score of Mix group was higher than other groups, so there was a significant difference variance of four groups.

The difference in mean score of Mix group is significant with all three other groups mean scores, special control group with the significance of .000. Post-hoc comparisons using the Games- Howell indicated that the mean score for group mix is different from the other three groups and the mean difference is significant at the 0.05 level.

Teaching implication

Prior to discussing teaching applications of the results of this study, it is necessary to show whether the results of this research find application in language teaching/learning. To do so, ideas of some of the experts in the field of second language teaching/learning are presented below.

For a long time, the role of listening comprehension in English teaching programs was ignored. According to Richards (2002), before 1970s listening was hardly presented in journals. However, this ignored condition of listening changed after Krashen (1985) theorized that comprehensible input which was very fundamental in starting language development. The significance of listening was highlighted with the introduction of a new method of teaching language called Communicative Language Teaching (CLT). Task has been the most important issue in the world of teaching and has been focused and defined by so many language experts.

As Long (1985), Much, stated, most of human activity in employment or in the classroom can be considered as a task – some of them with a communicative aspect, others not. Gilabert (2004) explained the concept of tasks in Long's example; a simple task is something in which language is not involved like painting a fence and an example of a complex task is the one in which language is needed: doing an interview in the field of reporting (decision making process, contacting the source, documenting the interview, etc.). Research on task design tries to find variables in task design that will lead to second language acquisition processes such as noticing (Bygate et al., 2001; Ellis, 2003). Tasks and their components, features, types, and the condition of implementing have been the focus of much research (Albert & Kormos, 2004). Tasks in listening haven't been taken seriously, just some language experts worked on the nature of task in listening comprehension. For example:

According to Gary (1975) giving credit to listening, particularly in the initial stages of second language learning, supplies advantages of four different sorts: cognitive, utility, efficiency and affective. A present-day listening lesson has to some extent these stages, Albert, A. and Kormos, J. (2004). It has pre-listening for context and motivation,

extensive reading to design the condition, pre-set questions and tasks, extensive listening, reviewing the questions and finally elaborating new vocabularies and testing new grammars.

Comparing the results of the studies conducted by Robinson (2001) or Skehan (1996) or Gilabert (2004) showed that there are differences in implying two features of complexity and saliency processing strategies between learners and their listening comprehension. Although this finding might not have any direct pedagogical implications for teachers, it can provide the insight for language teachers that focusing the attention merely on just listening without providing any tasks will not provoke and activate listening comprehension.

Conclusions

The results provided in the previous chapter showed that in making a task of listening for the learners in advance levels complexity or saliency of the task can have very small effect on the performance and listening comprehension of EFL learners, while making the task complex and salience simultaneously can have great effect on the performance and listening proficiency of advanced language learners. Below, a brief discussion of each of the findings is presented.

In this study four groups were tested differently by implementing two types of factors which affect the form and content of the tests. In the first group only the complexity factor was imposed in the body of the questions. The hypothesis was based on discovering the effect of making the task of listening complex by changing the structure, content and allocated time of the test. Comparing the differences of the scores provided by the pre and posttest and analyzing their variance by the one-way ANOVA revealed no significant difference in the listening comprehension ability of the language learners exposed to complex questions and tasks.

However, the result of the study by Ong&Zhang (2010) revealed that increasing the complexity of the task makes the learners more fluent in speaking. Gilabert. et.al (2009) studied the effects of manipulating cognitive complexity across task types and its impact on learners' interaction during oral performance.

The result of the study proved no significant difference between complexity and accuracy of performance of the learners. In this study the focus was on advanced learners comprehension and making the task complex for them had no effect alone, but The results of increasing task complexity for low-proficient learners, however, showed the positive effects on accuracy, fluency, lexical and structural complexity, Ishikawa (2006). The results of the study run by Blau (1990) show that changing structure of the sentence (in terms of simplifying syntax and including cues) of aural scripts does not have an effect on second language learners' listening comprehension. It was something which was proved in this study because changing the

structure of the sentences and making them more complex did not have a significant effect on the performance of the learners. It also caused them to focus more on the task.

The second hypothesis which was concentrating on the effect of task saliency on learners' listening comprehension was tested on fifteen other participants. This test checked if removing the clarity of the task and clearness of the questions items can affect subjects' proficiency in listening. Like complex group, no significant difference was observed on the effect of implementing lack of clarity in the listening task. No effective and extensive research has been performed to see what will happen if students do not know what activities they are asked to do about the listening task. Saliency has been performed in language learning about the degree in which the activity is getting vague. What gets salient in the mind depends on, familiarity frequency and conventions of encounters (Giora, 2003).

As discussed in review section of this study, saliency hasn't been directly studied in most papers and articles as the factor which affects the listening comprehension of EFL learners, but as saliency in language learning focuses on the familiarity of the targeted language that the listeners are exposed to, so it can be noticed as an important factor which is effective in achieving the listening objectives. The efficacy of language can be influenced by so many different factors, and the saliency of the listening task can be one of those items which may have an impact on the comprehension of the listening objectives. Saliency also refers to the most probable interpretations of a word unit. The most salient meaning of a specific word, expression or sentence is the interpretation or the most determined, familiar word which happens. It is based on previous knowledge and experience. So in this study, based on this hypothesis that learners have some background knowledge in their mind and can produce some linguistic issues related to what they study, they may be able to create the meaning and predict what they are supposed to listen or do on the task.

The third research question in this study analyzed the impact of making the task mix, (complex and saliency). Students received no questions at first, to make the task saliency, participants were deprived of looking at the questions beforehand. So the task lost its saliency and clarity and learners did not know what they will be asked to do on the questions after listening. In addition in complexity of the task learners didn't have any time to look at the questions in advance, the number of the questions had increased and they had no background knowledge about the topic of the task. Based on the result of the given test and posttest as well, the subjects have been able to answer majority of questions correctly. Talking with the participants of the Mix group, they believed that just taking notes while listening and not looking at the questions simultaneously cause them to focus on the content of the listening more carefully. They found looking at the questions and accessing them while listening as the case of distraction. The subjects were successful in presenting the correct answer for majority of the tests, However, they were deprived of getting to know the topic of the listening task, having enough time to look at the questions in advance, acquiring the background knowledge of the

listening activity and not being informed about what type of questions they are supposed to be asked and answer or what they have to do after listening to the specific item.

Doing a survey among participants and interpreting the result of the test show that exposing participants to the questions of listening and giving them background knowledge or letting them to know what task and activity they will be asked to do has no significant effect on their performance of the task and on their listening comprehension skills as well. no study has been done to check what will happen if depriving participants looking at the type of questions in advance or getting some information about the identity of the test. so in this study, salience referred to removing the clarity of the task and not letting the subjects know what kind of activity they will be asked to do after listening to the targeted listening items.

Implications of the study and suggestions for further research

Conducting the investigation on the effect of task complexity and salience on advanced EFL learners' listening comprehension provides implications and suggestions for further research. There could be more complete and extensive research by changing the dependent and independent variables based on different aspects of listening comprehension and a vast range of participants.

The results of this study could be extended by investigating whether implementing the factor of anxiety which is caused because of lack of knowledge and information about the task can have an effect on the result of the study. For example, it could be investigated if learners' anxiety in the test has an effect on performing the task in a complex and salience manner. Also it could be possible to check the effect of task complexity and salience on lower level language learners with less experience in language learning. There was a possibility of checking the effect of gender (male/female) factor on the performance of the participants based on comparing their mind mapping ability which can help them imagining the condition of the listening in their mind and answering the questions more effectively.

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