ISSN 2229-5518

The Impact of Content Related Information on Iranian EFL Learners' Listening Comprehension

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Abstract-The present study investigates the effect of content related information on listening comprehension and how far it assists EFL language learners with their performance on post-lecture detailed listening comprehension questions. Subjects took a TOFEL test, served as a pre-test to be randomized in a control and experimental group. In experimental group performed pre-listening tasks through which they received general prior information about the content of the lectures. They then listened and answered some multiple-choice comprehension questions that asked for the specific information in the lectures. The result of the data revealed that the experimental group did not perform significantly better than the control group. In other words , the treatment appeared to have no significant effect on the performance of the experimental group on post-lecture listening comprehension questions.

Keywords*:* Listening comprehension,content related information, prior information, top down, bottom up.

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Introduction

Listening is one of the most challenging skills for ESL learners to develop as it is probably the least explicit of the four language skills (Vandergrift, 2004). The complicated process through which meaning is derived from the stream of speech sound has been a challenging issue in language learning. The process of English listening comprehension is not a simple one of decoding the language of information, but an integration of process of decoder and meaning rebuild. Richard and other experts divide listening process into two parts, one is the "Bottom-Up" process, and the other is the "Top-down" process.
White (1998), and Brown (2001) explain that the bottom-up process is related to being able to recognize the small patterns of the spoken text such as words and sounds, and top-down involves applying larger items and prior knowledge of what is been said by the speaker in order to anticipate what he or she is going to say next. Applying bottom-up and top processes, learners face diverse difficulties that make the spoken discourse difficult to understand. According to Field(2004), bottom-up is perceived and processed at successively levels where(sounds, words, clause,…etc.) are added up to build bigger chunks whereas in top-down higher order information affects the perception of smaller units.

It has been emphasized that two processes are not independent from each other. There is a sort of compensatory relationship between them, when one process does not work effectively the other play its role to compensate the failure in listening (Stanovich, 1980). The effective applications of top down processes usually decrease the degree of reliance on acoustic signals and vice versa. The listeners´ pre-existing knowledge and their information of specific listening situations along with what they gleam of what is already said help them reduce the range of possible meanings and make plausible expectations about the received messages (Celce Murcia, 1995). What compensatory models also imply is that in different situation one process can act harder that these

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processes rely on each other performing as a task. However, it should not be considered as a preference of our processes to the other but these two sources interact to complete a task. In this sense, Listeners with less developed bottom up processes are expected to rely more on the contextual information.

Two important points should be considered with regard to role of prior knowledge .The first one is that the term prior information is used in a rather loose manner referring to a range of knowledge types including our world knowledge, topic familiarity and previous experience in an area (content schemata), our expectation of the rhetoric of a text (formal schemata) (Carell & Eisterhold, 1983), and the information received through earlier input, usually termed as co-textual information (Brown & Yule, 1983).

Another important point concerns the ways that prior knowledge has significant effect on listening comprehension. One view is that contextual information aids listener to pave his way to speakers' intended meaning. In addition prior knowledge helps the learner to choose the right interpretation which is crucial to predict what speaker is going to say from context. Our prior information of the type of interaction that usually happens between a doctors and a nurse in the operation room, for example, allows us to interpret a certain discourse happening in that context as a request for a medical device even though we may not be able to perceive all or any of the language used. Second and somewhat different way is to understand meaning of a word before decoding its sound through actual processing of data where higher level units influence processing of lower level units. For example, in a sentence like 'She was so angry, she picked up the gun, aimed and….'(adapted from Grosjean, 1980) listener might be able to recognize what is going to happened need very little acoustic information to understand the final word, be it 'fired',' shot' or whatever .Listeners' background knowledge about guns and what angry people to do with them help them to determine what the word is. this is a top-down process.

Review of the Related literature

Studies that looked at the effect of prior information on listening comprehension yielded somewhat different results. Makham and Latham (1987) used passages describing the ritual of Islam and Christianity. The data revealed that religious background had an impact in listening comprehension. Subjects recalled more information and provided more elaboration for the passage related to their own religion. The findings corroborated evidence for the role of prior information in listening comprehension of religious texts. Similar results were reported in Chiang and Dunkel (1992) and Teng (1998) where it was found that Tai' students performed better on listening text related to their own culture (the dragon boat festival and Confucianism) than American culture (the Amish people and Thanksgiving).

Jensen and Hasen (1995),examined the effect of prior study of lecture topics on the performance of content based listening and found that the effect of background knowledge was more present in technical lectures than non-technical lectures. Keshavars and Babai (2001) also found that that the performance of language learners, regardless of their proficiency level, on the listening tests for which related introductory information was provided was not significantly different from their performance on the listening test for which no schema was activated.

Chang and Read (2006) examining the effect of different types of support on the listening comprehension of Tai students found that providing general information about the topic of lectures was more effective than other support types such as vocabulary instruction, repetition of input and reviewing the listening questions. They further found that lower level language learners benefited more from topic related information than higher level language learners. They concluded that lower level language learners use topic preparation to make up for their less developed listening skills as well as lowering their anxiety level. Looking at the other works done in examining the effect of prior information on listening comprehension, we see somewhat different results. While the findings of the studies appear to underscore the role of top down processes and prior information in listening comprehension there are other studies whose findings delimit the effectiveness of such information (Chang & Read, 2007; Jensen & Hansen, 1995).

Chang and Read (2007) investigated the effect of different types of supports on language learners. They found that the provision of written general information providing general information on content of listening texts in learners" native language increased their listening comprehension in a limited degree.

Jensen and Hansen (1995) looked at whether prior study of a lecture topic enhanced performance on the lecture subtests of a content-based listening with underlying thought on the efficacy of prior knowledge on high proficient learners' listening comprehension.

As evident from the results of research mentioned above, an area where more divergent results are produced is related to the effect of provision of prior information. While some studies showed that the introduction of prior information could be a decisive factor and affect the

listening performance of learners (Wolff, 1987; Tyler, 2001,Chang and Read 2006), there were others which showed that the effect size may not be significant (Keshvarz &Babai, 2001, Chang and Read 2007). Obviously, various factors are at work to make the role of higher level information effective in listening comprehension. The present study aspires to shed more light on this issue.

This study aims to find out if the provision of general prior information about the content of listening materials assists language learners to direct more mental resources to lower level processing. The research question for this study has been formulated as follows:

What is the impact of content related information on the performance of language listeners on Iranian EFL learners' listening comprehension questions?

Method

The Participants of present study were 42 Iranian learners of English at private language institution of Tabriz; Iran and 30 participants the age of 15-18 were selected based on a proficiency test.

Material

The following materials were used in the study to measure language learner's proficiency and listening comprehension. First testing materials were a TOEFL actual test administered in the past by ETS in 2004. The test consisted of three sections including grammar, listening and reading comprehension and used as the pre-test in the study. The first section was a test of grammar with 25 items. The second section included a test of listening with 20 items. The third section was a test of reading with 25 items. To ease the procedure of conducting the test and to save time, writing section was eliminated. The second test materials were two recorded lectures taken from iBT TOEFL test contain 6 listening comprehension questions was administered in order to collect data for this study as post-test. Two questions (one from each listening test) asked about the general comprehension of listening were eliminated since it was assumed that information offered during pre-listening phase somehow gave their answers away. So, all in all remained 10 question; 5 for each listening comprehension.

Procedure

A 70 item language proficiency test of TOFEL was administered to 42 EFL subjects at a private language institute in Tabriz. After the scores of the proficiency tests were obtained, the researchers selected students whose language proficiency scores were at most one standard deviation above or below the mean .Based on their scores, 30 participants were selected at upper-intermediate level to participate in the study. Then, they were randomly divided into two groups of 15 participants(15 in experimental and 15 in control group).Their classes were held twice a week for 90 minutes for six sessions. Based on the video or audio materiales, learners in experimental group sometimes listened to a listening text to answer some listening comprehension questions. On the last day of class, a post-test were administered to both groups. Participants in experimental group before listening to lectures were given some general information about main point in each lecture, should be caution not given any information which related to post-lecture listening questions. Each lecture was followed by 5 multiple choice questions. Learners listened questions through tape and selected related answers from their answer sheets. The tape was played only once. Participants in control group did not receive any information about text. They just listened text and answered questions. The scores obtained by two groups were compared with one another to see whether or not there was difference between groups in their listening comprehension test.The post-test was roughly equivalent to pre-test and also to the tasks used in exercises which were presented to them in the form of audio listening comprehension test.

Result

After administering the post-test, according to obtained data, the performance of two groups was compared to observe any significant effects on performances of the subjects.

Table 1
Descriptive statistics of subjects′ performance on post-test

Groups	N	Mean	SD
Experimental	15	16.9	1.12
Control	15	16.8	0.83

Table 2
The post-test performance of two groups

Groups	N	Mean	SD	SD.E	DF	t-value	t-critical	p
Experimental	15	16.9	1.12	0.28	28	0.268	2.04	.72
Control	15	16.8	0.83	0.21				

Table 1 is the descriptive statistic of the two participating groups. As it is shown, there is not much difference between the mean scores of the two groups (16.8 for the experimental and 16.9 for the control group).

A t-test also showed that the difference between the mean scores of the two groups was not statistically significant. As shown in Table 2 the t-value obtained from comparing the two means was equal to 0.268 and t-critical at 0.05 level of

significance was equal to 2.04 .So¸ the treatment appeared to have no significant effect on the performance of the experimental group on post-lecture listening comprehension questions.

Discussion

This study has examined the effect of content related information on performance of language learners on listening comprehension questions.The result of t-test revealed that there was no significant difference among two groups .In other word¸ prior information had no effect on performance of language learners on listening comprehension questions that asked about detailed information and supported Chiang and Dunkel (1992) reported that content knowledge did not support comprehension when listening to monologue texts such as a lecture. Similarly, Hansen and Jensen (1994) and Jensen and Hansen (1995) found only a trivial effect of content knowledge on L2 listening comprehension. Recently, Madden (2004) wrote that content knowledge was not a significant predictor of success in L2 listening comprehension. However, findings of L2 listening studies have shown inconsistent results about the effect of content knowledge on L2 listening comprehension. One point of the inconsistent findings about the effect of content knowledge among L2 listening comprehension research is the type of listening texts. Akbulut (2007) stated that the text specificity influenced the use of L2 learners' prior knowledge of topics when reading (or listening to) a passage. Research has shown that texts employed in the study of content knowledge effect ranged from general texts that were equally understandable by students in any discipline, to highly specific texts that could generally only be understood by learners with not only knowledge of a particular subject area but also a detailed knowledge of some specific process within it (Long, 1989; Clapham, 1996). The type of the listening texts used in our study was not similar to the texts used in the studies in which prior knowledge appeared to have significant effect on the participants' listening comprehension (Wolff, 1987; Tyler, 2001).Texts used in the current study had a considerable degree of transparency and as such the application of prior information in the form of the summary of the main points of the lectures did not make much difference. The key words of the texts employed in our study could have activated in the control group the same schemata that the treatment activated in the experimental groups. The transparency of the texts allowed the control group to catch up on the experimental group and the treatment remained ineffective. Field (2004) showed that language learners use of top down and bottom up processes may vary depending, among others, on the type of the text and task employed. The relationship between text difficulty and the learners use of support materials is acknowledged by Wolff as he made the point that 'text difficulty can be correlated with the use of contextual cues: the more difficult a text is, the more the informant makes use of these cues' (1987: 316).

Another point with regards to the findings is concerned type of information provided through pre-listening was outlines of main points covered in each lectures that provided learners with top-down information. On the other hand, post-lecture questions asked for specific information that required language learner to use their lower level processing. Questions like"what is stated in lecture about the rules for teachers?" or "what rules about clothing are discussed in the lecture?"addressed detailed information in the text and as such may require more bottom up processing than top down one.

Conclusion

The results of the study showed that the experimental groups had no better performance in comparison to control group in their listening .The idea that availability of general prior knowledge about the content of the forthcoming lectures could free some mental resources and direct them towards less developed lower level listening processing was not warranted by the findings of the present study. In other words, it does not seems that the compensatory nature of comprehension models functions in a way that results in the enhancement of less developed bottom up listening skills. It turns out that the interaction between the higher and lower processes is more complicated that it may appear at first sight. Our findings are in line with Townsend and Bever (1991) study which also disproved the commonplace assumption that pragmatic likelihood necessarily assists the processing of lower level linguistic units.

The results obtained in this study have implications for the language classes are to do with the type and amount of materials used during the pre-listening activities. It points out to develop listeners' top-down processing skills, it is suggested to use short and authentic texts on topics related to learners' level, interest, and familiarity.EFL teachers may first ask their students to listen to the text as a whole and then try to interpret what they hear. This approach will allow listeners to use prediction for deeper cognitive processing of the text Top-down processing strategies may help to predict the main idea of the text, but ineffective listeners are not always able to recognize even the words that they do know (Field, 2003). Hulstijn (2001) suggested that the development of a top-down approach for listening is inadequate for linguistic input. He argues that bottom-up

skills must also be developed, so that all the components of the linguistic cues become meaningful units for the listeners. To develop listeners 'bottom-up processing skills for word recognition, it is important to enhance their vocabulary and linguistic knowledge since they are significantly correlated with listening comprehension (Meccarty, 2000). It is suggested that before listening to the text, EFL teachers should show students keywords that may interfere with their overall understanding of the text.

Like all studies¸the present study suffered from some shortcomings.First¸the number of participants was small, it may not be possible to generalize the findings of this study to EFL students from other contexts. Second, listeners took note while they listened to lectures only once.It is not obvious to what extent the collected data might have been affected by note taking abilities of test takers. Third¸the study was carried out for 6 sessions because of time constraint and the availability of participants. As this study was carried out with two groups of high school student at private institude¸it is suggested that similar experiments with a large number of subjects can be replicated taking into consideration the effect of topic¸memory¸and lecture length on listening comprehension..Language teachers and syllabus writers are supposed to incorporate a range of pre-listening activities and change the weight of listening lesson from testing listening into teaching listening, so that they could support language learners to enhance their listening performance. It is hoped that finding could contribute to our understanding of nature of top-down and bottom-up processes interact in comprehension of speech.

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