

Effect of Background Knowledge on Test Performance in Listening Comprehension

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Abstract

The extent to which cultural background knowledge affects listening comprehension tests in a second language is examined in this research. When tested in English, it was found that Maldivian students did best on an excerpt involving a familiar custom and significantly worse when tested on similar excerpts using unfamiliar customs. Implications for the assessment of second language listening comprehension skills are discussed.

Introduction

The focus of this research is the extent to which cultural background knowledge affects listening comprehension in a second language and possible implications for the assessment of second language (L2) listening comprehension skills. Such assessments are especially important in countries such as in the Maldives where examinations developed by external authorities are used for local purposes. This study aims to study the role of cultural background knowledge in L2 listening comprehension.

The effect of background knowledge on general comprehension has been a topic of research since the significant works by Bransford and Johnson, Anderson, *et al* and Steffenson, *et al* in the 1970s. Their findings that background knowledge aided comprehension led second language researchers to investigate the phenomenon as well (Schmidt-Reinehart, 1994).

Convincing evidence that a person's level of familiarity with the contents of a test affects his/her performance has been illustrated by research on both listening and reading skills (Dunkel, 1991; Lynch, 1998; Mendelsohn, 1998; Rubin, 1994). Results from such studies indicated that the participants' performances were affected as much by their background knowledge as by their language proficiency and that listening comprehension is enhanced by background knowledge about the content.

With the increasing spread of English as an international language, this issue is becoming even more salient. Since English started gaining increasing power as a *lingua franca* in the world, a higher demand for proof of English proficiency has been created (Isharyanti, 2004). This has led, in turn, to the development of a large body of commercially available English language examinations for various purposes – improving employment prospects, seeking further education, preparing to travel or live abroad or attaining an internationally recognized certificate showing one's level of competency in English language.

It is not uncommon for countries to contract with such exam-development organizations so the examinations can be used as a measure of language competency within the country's own education systems. The Maldives, a very small country whose native language, Dhivehi, is spoken only by its small population of about 280,000, is an example of such a country. It is crucial that measures be taken to ensure that particular

groups are not disadvantaged in these language proficiency examinations due to factors such as cultural background. This is especially important in the assessment of listening comprehension, because differences in listening comprehension may be a function of listeners' lack of essential cultural background knowledge rather than differences in language comprehension.

If test-takers are disadvantaged on the basis of their cultural knowledge, then the validity of the test is, by definition, compromised. The argument for analyzing the validity of such tests is that the meaning of English language proficiency is hence defined in terms of the purpose of the test. This means that the values, implications and the social consequences of the tests warrant careful thought.

This study aims to investigate if and to what extent cultural background knowledge influences Maldivian test-takers' performance on tests of listening comprehension in a English, their second language. The research question is: *Does a test-taker's background knowledge about the contents of a listening comprehension test in a second language affect his/her performance in second language listening comprehension tests?*

Methodology

Location Description

Since the Maldives has few in-country opportunities for tertiary education, it is considered essential that students have internationally recognized certificates of English Language competence to apply to foreign tertiary institutes. All major examinations in the country are brought from the United Kingdom. At the end of grade 10 Maldivian students do take the Cambridge GCE Ordinary Level Examination and the Advanced Level of the same examination at the end of grade 12. In addition, the suite of Cambridge ESOL examinations are used in the country for determining English Language competence levels at various levels.

It is not uncommon for Maldivian students to attend at least a year of training for these examinations in one of the many institutes that offers test preparation programs. Additionally, a number of students either have private tutoring or do test preparation themselves. The tests are available to people applying through registered institutes as well as individuals applying for it them privately. This research was carried out in the Maldives at a tertiary education institute, which will be referred to in this study as the TEI.

Study Participants

All participants (N = 67) were Maldivians whose native tongue is Dhivehi. As a Cambridge GCE Ordinary "O Level" pass in English is an entry requirement for diploma granting programs at TEI, all participants had similar levels of English proficiency.

Procedures

The actual examination procedure was modeled on the professional examinations protocols utilized in the country. Participants were asked to take a short test of listening comprehension in English that involved listening to three excerpts about distinct wedding customs in three different cultures – traditional western, Pakistani and African American. They were then asked to answer *fill-in-the-blank* questions based on the excerpt.

The participants were also asked to complete a questionnaire asking for their opinions about the level of difficulty of the different excerpts, and for their reflections on

the reasons for these difficulties. The answers on this questionnaire were taken as indicators of actual participant background cultural knowledge.

Given that the Maldives is a 100% Muslim nation in South Asia and that Indian/Pakistani television programmes and movies are popular sources of entertainment among many Maldivians, it was assumed that the Pakistani customs would be most familiar to the participants of this study.

Again, these procedures followed the professional examinations protocols utilized. The audio recording used in the test consisted of: 1) an inquiry about whether participants were satisfied with the acoustics in the room; 2) general instructions and explanations about the tasks included in the test; 3) three excerpts each repeated once after timed pauses between each (a bell indicates the end of each pause); and 4) a 10 minute pause at the end of the last excerpt for participants to transfer answers to the answer sheet.

To ensure reliability, answer sheets were scored for both exact and acceptable replacement words) by the researcher and an independent marker. The questionnaires on perceived difficulty of the excerpts were also coded independently by two separate coders, with any discrepancies reconciled through coder consensus.

Results

It was found that participants did best on Task 2 which involved the excerpt based on the familiar culture (Pakistani Muslim), with an average of 3.61 questions answered correctly, as compared to .88 for Task-1 (traditional Western), and 1.27 for Task-2 (African-American). **Table 1** shows these differences.

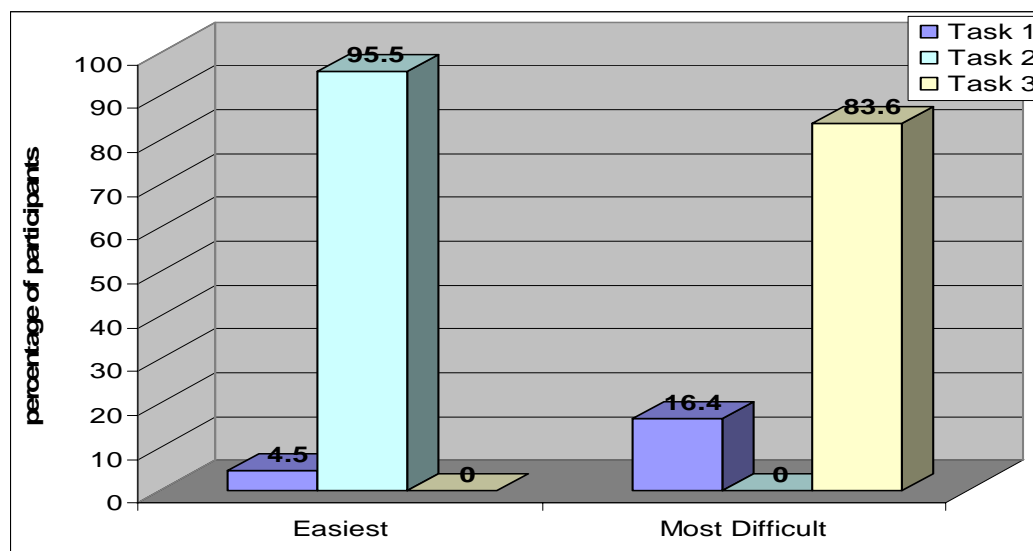
A repeated measures ANOVA found the scores on the three excerpt tasks to be significantly different [$F(1,66)=144.776$; $p<0.001$]. Additionally, post-hoc dependent t-tests indicated that all text tasks differed significantly from each other as well [tasks 1 & 2 – $p<0.001$; tasks 1 & 3 – $p<0.003$; tasks 2 & 3 – $p<0.001$]. The differences between the mean scores of task 1 and 3 ($d = .379$) was expectedly lower than between task 1 and 2 ($d = 1.867$) and task 2 and 3 ($d = 1.382$), where d is the *Cohen's d* for effect size (mean difference /pooled standard deviation).

Table 1. Student performance on different tasks

Correct Answers [N = 64]	Task 1 Traditional Western	Task 2 Pakistani Muslim	Task 3 African American
Maximum possible score	6	6	6
Minimum score	0	1	0
Maximum score	4	6	5
Mean score	0.88	3.61	1.27
Standard deviation	1.418	1.317	1.578

On the post-exam questionnaires asking about perceived task difficulty, 83.6% of participants reported task 3 (African American excerpt) as the most difficult while 16.4% said task 1 (Traditional Western excerpt) was the most difficult. These findings are illustrated in **Figure 2**. None of the participants chose task 2 (Pakistani Muslim). Regarding task ease, a small percentage of participants (4.5%) chose task 1 as the easiest, 95.5% chose task 2, and 0% chose task 3.

Figure 2. Participants' perception about level of difficulty of tasks



Task 1 – Traditional Western
 Task 2 – Pakistani Muslim
 Task 3 – African American

The majority (70.1%) of the 95.5% participants who chose task 2 as the easiest, reported believing it was so because they were familiar with the culture described in the monologue heard in this task. Also, of those the 83.6% who selected task 3 as the most difficult, the majority reported they were of the opinion that their unfamiliarity with the culture described in this task was the reason they found the task most difficult.

Discussion

In accord with previous research on the relationship of cultural familiarity and comprehension, this study found that participants performed significantly better on test questions that had culturally familiar content. The average scores on questions relating to an excerpt based on traditional western wedding customs and African American wedding customs were low (0.88 and 1.27 respectively, out of possible 6). None of the participants got all the answers for either of these tasks right. In contrast, for the questions on the excerpt based on Pakistani Wedding customs, no one got all the answers wrong and the average score (3.61) was more than half of the maximum possible. These differences were strongly significant.

An interesting finding that emerged from the results was the discrepancy between the excerpt the majority of the participants reported as most difficult and the one on which most of them performed worst. Most (83.6%) of the participants said they found excerpt on African American weddings to be the most difficult, while a small group (16.4%) found the traditional western excerpt to be the most difficult. However, the mean performance for task 1 on African American weddings was higher (1.27) than the mean performance for task 3 on traditional western weddings (0.88). This discrepancy could have occurred because many of the participants have not heard about the African America wedding customs, but many would have seen western weddings on television programmes and in movies. However, most such programmes do not provide details of the wedding customs, but depict only enough to indicate that it is a wedding taking place. Therefore these participants might have felt that they knew more about the western customs than they actually did. This also shows how

crucial background knowledge can be in understanding a listening comprehension task. One might conclude that even when test-takers perceive contents to be more familiar, their performance is in fact determined only by how much background they actually have about it.

How familiar participants would be with the content of the excerpt was assumed initially based on the researcher's knowledge of the culture and context of the general target population. Analysis of participants' responses revealed not only that a vast majority (95.5%) thought 2 (about Pakistani wedding customs) was the easiest, but also that most (70.1%) of the participants who chose that task as the easiest cited familiarity with the culture as a reason. An example of a typical response was: *I knew about these wedding customs even before listening to this excerpt.*

Similarly 83.6% of participants reported excerpt 3 was the most difficult, and 69.6% of these alluding to unfamiliarity with that culture as a reason for this. A common response was: *very difficult to comprehend when I am hearing about these customs for the first time.*

From these responses and the fact that none of participants chose the excerpt on the Pakistani wedding as the most difficult, it can be concluded that participants had considerably more background knowledge about the contents of excerpt 2 compared to the other two.

In light of the findings from previous research carried out in relation to both reading (Roller & Matambo, 1992) and listening skills (Chiang & Dunkel, 1992; Markham & Latham, 1987), it was assumed that these participants' comprehension of excerpts 1 and 3 would be impeded considerably, as they would lack the schematic information necessary for effective comprehension (Alderson & Lynch, 1988; Buck, 2001) even though they were proficient enough in English to process the language element.

The findings from this study have significant implications for assessment of listening comprehension in second languages. These implications are of particular gravity in contexts such as in the Maldives where listening comprehension tests developed by external bodies are used as high stakes ones and serve as "gate keepers" for education and employment. If listening comprehension tests such as these include culturally-specific content, test-takers will likely be scored on the basis of how well they know a particular culture rather than their level of proficiency in the second language.

Conclusion

This study has demonstrated that test-takers' background knowledge about the contents of a test enhances their listening comprehension and thus has significant affects on their performance on listening comprehension tests. In light of these findings, it can be concluded that contents of listening comprehension tests should be chosen with care.

Although the present study has found evidence to support the effect of cultural background knowledge on listening comprehension, such results must not be over generalized. This study should be replicated and the results should be confirmed by other studies with different types of texts and learners from different cultures. If possible, this study should be repeated using reading passages that would allow insight into why participants are able to process familiar texts better than those that are not. Also, future studies might consider factors such as gender differences and participants' media exposure and other demographic variables, not explored by this research.

In countries such as the Maldives, it is important for officials to choose examinations that do not pose disadvantages to test-takers on the basis of their background knowledge about the contents included in the test. But in countries like these educators may feel they have no choice but to use examinations developed by independent international bodies in order to offer their students internationally recognized proof of their language competency. It might, however, be useful to begin a discussion of a national review and possible replacement of some international examinations currently being used within the local educational system, if their content familiarity cannot be confirmed.

Also, international testing bodies should take into consideration the fact that their examinations are taken by a body of test-takers who come from a myriad of cultural backgrounds. To reaffirm the warning of Bachman (1990), test makers should be advised to avoid the manufacturing and selling of high stakes tests to countries like the Maldives if those tests use unfamiliar culture-specific content.

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