The Comparative Effect of Baseline Input versus Pre-Modified Input Using Instrumental Jazz Music on EFL Learners’ Reading Anxiety

Shahin Shahnazi, Master of TEFL
Nasim Shangarffam, Assistant Professor
English department, Central Tehran Branch, Islamic Azad University, Tehran, Iran

Abstract

The present study was an attempt to investigate the effect of baseline input and pre-modified input using instrumental jazz music on 50 EFL learners’ reading anxiety. Seventy Learners chosen via convenience sampling at Intermediate level were homogenized using a piloted Preliminary English Test (PET). The participants were then randomly assigned into 2 groups of baseline input and pre-modified input, each including 25 students. During baseline input the instruction of the reading tasks which were from New Headway Intermediate (Soars, 2019) were not modified and paraphrased. However, in pre-modified group the instruction of tasks were modified and paraphrased. During the treatment both groups were supposed to listen to some instrumental jazz songs which were repeated during the session. To investigate reading anxiety, The English Version of Foreign Language Reading Anxiety Inventory (EFLRAI) was administrated prior to and after the treatment. Results were analyzed with the Statistical Package for Social Science (SPSS) leading to the rejection of the null hypothesis and showing that the pre-modified group had significantly less anxiety than the baseline group, although both groups had demonstrated less reading anxiety compared to the commencement of the intervention.

Key Words: baseline input, pre-modified input, instrumental jazz music, reading anxiety.

Introduction

The concept of language input is one of the essential concepts of second language acquisition (SLA). All types of data from a target language that the learners are exposed to and from which they learn are called input (Anani Sarab & Karimi, 2008, p 183). In fact, no individual can learn a second language without language input of some sort (Gass, 1997). Accordingly, exposure to the target language input is believed to be necessary by SLA researchers. However, the input received by second language learners (L2) is often modified in order to make it more comprehensible and therefore to improve the process of SLA.

Comprehensible input is a hypothesis first proposed by Krashen (1981) claiming that L2 learners can acquire language by understanding messages that are slightly above their current English language level. Studies on comprehensible input have mostly concentrated on how to make the input comprehensible to the learners or non-native speakers (NNSs) through studying the native speakers’ (NSs) speech or teacher talks in different classrooms and contexts.
In baseline input learners read the instruction of the tasks and complete them. In this type of input learners do not communicate with the teacher or ask questions. Baseline input refers to a type of language input which is not modified for the sake of comprehension (Ellis, 1994).

Nevertheless, current L2 researches have tried to identify the factors that make the input more comprehensible to the learners. In this regard, input comprehension was considered in different kinds of linguistic environments. Following this, another type of input was termed as pre-modified input. In fact in this approach, native speakers (Ns) or teacher modify their input to facilitate non-native speakers’ (NNSs) or students’ comprehension.

This modification can be maintained in different forms, like repetitions, paraphrase of words or sentences, and reduction of sentence length and complexity, among others. According to Ziglari (2008), it has been assumed that language acquisition can be fostered by the modified input in the environment.

On the other hand, reading anxiety is an issue which learner’s might face while comprehending and reading a text. Reading anxiety is an anxiety that learners experience while they are reading in their new target language (Zhou, 2017). Reading anxiety is an issue which learner’s might face while comprehending and reading a text which in itself can result in physical and cognitive reactions. Physical reactions may include the release of adrenaline and symptoms such as sweating, feeling shaky, a pounding heart, rapid breathing and stomach ache (Jalongo & Hirsh, 2010). Cognitive reactions may include an overwhelming sense of dread, low self-esteem, feelings of helplessness and expectations of public humiliation (Jalongo & Hirsh, 2010).

Learners who have issues with reading are sometimes described as poor, reluctant, or struggling readers (Jalongo & Hirsh, 2010). Reading anxiety is an anxiety that learners experience while they are reading in their new target language (Zhou, 2017).

As an important part of our life music can serve a vital role in the education as well. They are inadvertently listening to the music played in the loudspeakers. Most of the music which has surrounded us is in the form of background music. Will Earhart, president of the Music Educators National Conference, stated, “Music enhances knowledge in the areas of mathematics, science, geography, history, foreign language, physical education and vocational training” (as cited in Morrison, 1994, p. 33). “Music is also universal and can open wonderful doors to the education of children” (Behar, 2000, p 26).

As a teacher reading anxiety has always been an issue for some of my students due to a lot of reasons such as unknown words, complexity of the texts and lack of receiving the right input. Teachers can help learners cope with reading anxiety by helping them modify input in order to comprehend better and have less reading anxiety.
In Iran Pazhakh (2012) found that the participants who were given pre-modified input achieved higher vocabulary comprehension rather than those receiving other types of input. In another study, Zhang (2000) also explored the anxiety of 155 Chinese intermediate students in ESL reading classes. The findings with respect to the interview suggested that several factors affect both male and female ESL readers’ apprehension; factors such as students’ lack of L2 proficiency, cultural knowledge, the changed learning context and their teacher’s diversity effect.

As a musician who has always been enthusiastic about music, the combination of playing some instrumental songs and giving some tasks to my students in classrooms has always given me good feedback from my students and sometimes their parents. They believe that they are more focused and relaxed when they listen to some instrumental songs like jazz music while doing their tasks at the same time. Therefore the purpose of this study was to investigate the comparative effect of baseline input versus pre-modified input using background instrumental jazz music on reading anxiety of the EFL learners.

**Review of Literature**

According to Park (2002), a learner modifies or simplifies his/her input in some ways, before he/she sees or hears it. This modification or simplification can happen by repetition, paraphrase of vocabularies or sentences and reduction of sentence length and complexity.

The studies applied within this framework mostly focused on describing modifications those different speakers- a mother i.e., motherese, a native speaker e.g., foreigner talk, or a teacher e.g., teacher talk, make when addressing a child or a second language learner. There are two kinds of pre-modified input: simplification and elaboration.

Simplified input can be in the form of less complex syntax and restricted vocabulary. In simplified input, in order to make the original input comprehensible and easier to understand for the learners, all potential unfamiliar and unknown words are deleted from the text.

Elaboration refers to “Features such as slower speech, cleverer articulation, and emphatic stress, paraphrases, synonyms, restatements, rhetorical signaling devices, self-repetition, and supplication of optimal syntactic signals serve neither to simplify nor to make complex the surface form rather they are clarifications of meaning only, opportunities for the listener/ reader to better decode the communication” (Parker & Chaudron, 1987, p 110).

There are a number of researches that investigated the effects of interactional adjustments on comprehension and vocabulary acquisition.

Most studies have investigated the role of input and output in conversational interactions and have mainly focused on native speakers (NS) interactional moves as well learners’ response to NS interactional moves in native speakers-nonnative speakers’ (NS-NNS) interaction. A considerable number of studies, however, have also investigated NNS-NNS interactions,
examining whether learners are able to provide some useful linguistic feedback to other learners. (E.g., Long, 1982; Pica et al, 1987; Ellis, Tanaka & Yamazaki, 1994; Loschky, 1994; Mackey, Gass & McDonough, 1999). Most of these studies are related to the difficulties that learners and their interlocutors have in understanding each other’s message and their attempts to make themselves understood to each other.

Pica, Young and Doughty (1987) have compared pre-modified input with the input modifications produced during negotiated interactions. They compared how a) baseline input, b) pre-modified and c) interactionally modified input affect adult learners’ comprehension.

The results of their study showed that comprehension on the part of the NNSs was lower in the pre-modified directions than in the unmodified input with interaction. Their findings supported the idea that interaction and repetition through interaction increased comprehension.

Different types of foreign language anxiety have been recognized including situation-specific anxiety, state anxiety, and trait anxiety, all of which can be either facilitative or debilitative. MacIntyre and Gardner (1989) note that situation-specific anxiety develops from negative experiences, particularly early in language learning. Giving a speech, taking a test, doing math, and using a second language are examples of situation-specific anxiety. Foreign language anxiety is a form of situation-specific anxiety (Horwitz, et al., 1986). State anxiety refers to an apprehension that is experienced at a particular moment in time as a response to a definite situation” (Amir Jahansouz Shahi, 2009, p. 22), whereas trait anxiety is related to a “generally stable predisposition to be nervous in a wide range of situations” (Zheng, 2008, p.2).

Language learning anxiety was – until quite recently – normally associated with productive skills. Today, there is an increasing recognition of anxiety in receptive skills; that is, listening and reading. One of the relatively less-explored types of anxiety is reading anxiety – a specific phobia, a situational type and an unpleasant emotional reaction toward reading which has physical and cognitive reactions (Jalongo & Hirsh, 2010).

**Methods**

**Participants**

From an original 70 participants, 50 were selected as a homogenized sample through using a piloted sample PET; they were EFL learners within the age range of 12-18 who studied English as a Foreign Language at intermediate level in a language school called “Kish Institute of science and Technology” in Tehran. These participants included both male and female (30 male participants and 20 female participants) chosen non-randomly via convenience sampling.

Before administration of the PET, it was piloted on a group of 30 other students with almost similar characteristics to that of the target sample. Two experienced English teachers also participated in the study rate the scoring of PET writing section.
Instrumentation

Preliminary English Test (PET) is one of Cambridge English Qualifications. A B1 Preliminary qualification shows mastery over the basics of English and having practical language skills for everyday use. A sample PET test was downloaded from Cambridge English Language Assessment website which was first published in 2015.

The other research instrument of the study was the reading anxiety scale used as both a pretest and a posttest, English as a Foreign Language Reading Anxiety Inventory (EFLRAI) 2012, consists of 27 items which are rated on a 4-point Likert format, with 1 (totally disagree) to 4 (totally agree). Scores range from a low of 27 to a high of 108, with higher scores reflecting greater perceived EFL reading anxiety.

Materials

The texts which were given to the participants were form New Headway intermediate book by Liz and John Soars 4th edition which was published in 2009. Pages of this book which are about reading comprehension were printed and given to the participants in the classroom every session. There were 12 texts from unit 1 to 12. According to the blurb of this book, Headway is the world's best-selling English course book.

List of the songs below were played during the treatment in the classroom by a digital player. The songs are from “Time out” album which was released by an American musician Dave Brubeck in 1959.

(Blue Rondo à la Turk” – 6:44) - (Strange Meadow Lark” – 7:22) - ("Take Five” – 5:24)


Procedure

Piloting the sample PET was the first step for implementing the study. So, a version of PET was administrated to 30 non-participating candidates who had almost the same characteristics of the target sample. The speaking section of the test was omitted in piloting phase and in the main administration as well due to lack of administration facility, namely professional examiners and raters, speaking room, and recording device.

In order to proceed with the piloted PET, internal reliability of the two raters were calculated by SPSS. Following this, the three characteristics of each individual item namely, item facility, item Discrimination and choice distribution were determined and after that upon the administration of the piloted test, among the 70 participants, 50 EFL learners of Intermediate level who scored one standard deviation above and below the mean. The participants were selected non-randomly through convenience sampling.
The next step was dividing participants into two groups randomly, the Baseline input group and the Pre-modified input group. Prior to the treatment, the participants received EFLRAI as pretest to have a baseline of their reading anxiety. Afterwards, both groups were instructed by the same teacher, the researcher, using the same materials, and covering the same units. In this study the dependent variable, reading anxiety, was measured after implementing baseline input and pre-modified input as the two modalities of the independent variable in two different groups.

**Treatment in Baseline group**

In this type of treatment which lasted about 12 sessions (each session is about 40 minutes), the teacher gave the students texts from New Headway Intermediate book. Students were supposed to read the texts and answer the questions. There were different types of questions exist such as True-False, matching sentence ending, matching heading questions, short answer question, complete answer questions, multiple choice questions and underlining correct answers. During the task the teacher did not modify, paraphrase, pre teach and give any further information about the instruction of the tasks and the text itself to the learners. Learners were supposed to do all the tasks themselves without asking any questions about instructions or the texts. Learners did not obtain any feedback or explanation from their teacher. Specific Time (30 minutes) was given to participants to read the text and answer the questions in different tasks. During the treatment some instrumental jazz songs which were mentioned in instrumentation and materials were played and repeated from the first until the end of each session as background music.

**Treatment in pre-modified group**

In this type of treatment, the teacher gave another group the same texts from Headway Intermediate book. Students were supposed to read the texts and answer the questions. Different types of questions existed such as True-False, matching sentence ending, matching heading questions, short answer question, complete answer questions multiple choice questions and underlining correct answers which were exactly same as the baseline group. However, the teacher taught key vocabularies from the instruction of tasks then paraphrased, modified, explained the instruction of each task orally. During this time, students were not allowed to ask any questions or give suggestions. Then, specific time (30 minutes) was given to participants to read the text and answer the questions in different tasks. During the treatment some instrumental jazz songs which were mentioned in instrumentation and materials were played and repeated from the first until the end of each session as background music.

**Results**

First of all, it was required to measure the homogeneity of the two groups. Since there was a normal distribution in the experimental groups, independent samples t-Test was run between the Baseline and Pre-modified groups in accordance to their PET scores. Table 1 depicts that with an \( F=.400, p=.530>.05 \), equal variances were assumed and according to the first row, \( t=-.199, df=\)
48, \( p = .843 > .05 \), there was no significant difference between the Baseline and Pre-modified groups. Therefore, it was concluded that these 2 groups were homogenous prior to the treatment.

Table: 1
Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.400</td>
<td>.530</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-</td>
<td>.199</td>
</tr>
</tbody>
</table>

Reading Anxiety Pretest Administration

The reading anxiety pretest was administered to the participants in the two groups in order to have a base estimate of this variable before starting the treatment. The details are presented in Table 2.
Table 2

Descriptive Statistics of Pretest Scores

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>baselinePOST</td>
<td>29</td>
<td>27.00</td>
<td>56.00</td>
<td>83.00</td>
<td>65.51</td>
<td>7.20</td>
<td>51.90</td>
<td>.396</td>
<td>.434</td>
</tr>
<tr>
<td>premodPOST</td>
<td>29</td>
<td>44.00</td>
<td>47.00</td>
<td>91.00</td>
<td>75.00</td>
<td>8.76</td>
<td>76.71</td>
<td>-.987</td>
<td>.434</td>
</tr>
</tbody>
</table>

Valid N (listwise) | 29

According to the data, the two groups of baseline and pre-modified input had a mean of 65.51 and 75.00 respectively with a standard deviation of 7.20 for the first and 8.75 for the latter. The skewness/std error of skewness fraction for the baseline group was between the range of -1.96 and 1.96 showing normalcy of the distribution, yet the pre-modified group’s fraction did not stand within this range and proving to be not normally distributed.

Figure 1

Distribution of baseline group’s pretest scores
Figure: 2

Distribution of pre-modified group’s pretest scores

**Reading Anxiety Posttest Administration**

At the end of the treatment, the reading anxiety questionnaire was administered again, the details of which are presented in Table 3.

### Table 3

<table>
<thead>
<tr>
<th></th>
<th>N Statistic</th>
<th>Range Statistic</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Variance Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaselinePRE</td>
<td>29</td>
<td>36.00</td>
<td>47.00</td>
<td>83.00</td>
<td>61.8966</td>
<td>6.18376</td>
<td>38.239</td>
<td>1.148</td>
<td>.434</td>
</tr>
<tr>
<td>premodPRE</td>
<td>29</td>
<td>29.00</td>
<td>51.00</td>
<td>80.00</td>
<td>64.8621</td>
<td>6.15121</td>
<td>37.837</td>
<td>.339</td>
<td>.434</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the data, the two groups of baseline and pre-modified input had both experienced a decrease in their level of anxiety, as compared to the original mean of 65.51 and 75.00, they scored a mean of 61.89 and 64.86 respectively with a standard deviation of 6.18 for the first and 6.15 for the latter. The skewness/std error of skewness fraction for the pre modified group was between the range of -1.96 and 1.96 showing normalcy of the distribution, yet the baseline group’s fraction did not stand within this range so proving to be not normally distributed.
Figures 3 and 4 present the distributions.

**Figure: 3**

Figure 3 Distribution of baseline group’s posttest scores

**Figure: 4**

Distribution of pre-modified group’s posttest scores
According to the Table, the pre-modified group had a higher difference score equal to 12.89 as compared with the baseline group whose mean difference turned out to be a lower 7.24. The standard deviations were 6.16 and 7.60 accordingly. The distributions, however, were normal in neither group as their skewness/std error of skewness figures for both were out of the range of -1.96 and 1.96.
Since the two distributions were not normal, the researcher applied the Mann-Whitney test to investigate the possible significant difference between the two groups’ difference scores which is detailed below.

**Mann Whitney Test**

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>The distribution of GAIN is the same across categories of GROUP</td>
<td>Independent Sample Mann-Whitney U Test</td>
<td>.002</td>
<td>Reject the null hypothesis</td>
</tr>
</tbody>
</table>

As shown in the Table, the null hypothesis of the study was rejected ($p=.002<.05$) proving that the students in the pre-modified group had outperformed the baseline group significantly and had shown lower anxiety although both groups had shown a lower level of anxiety in comparison with the pretreatment stage.

As a complementary analysis, the researcher examined whether each group had had a significant change in their reading anxiety pre and post treatment. The analysis for the baseline group was the nonparametric Wilcoxin test as the data was not normal.
Discussion

There have been many efforts to improvise methods and techniques of teaching in order to lessen reading anxiety of learners. However, it is still a common problem for learners and different kinds of foreign language reading anxiety have been recognized in EFL learners. Children who have problems with reading are sometimes described as poor, reluctant, or struggling readers (Jalongo & Hirsh, 2010). It is now recognized that reading anxiety as a concept with psychological reality is an anxiety that learners experience while they are reading in their new target language (Zhou, 2017). As an effective element which has been emphasized for some time now music has been proven to be a universal concept which can open wonderful doors to the education of children (Behar, 2000, p 26). Correspondingly, the researcher of this study, a teacher who has always been passionate about the effect of music, was interested in the possible interplay between input and music which led to an investigation of playing some instrumental jazz songs equally in two experimental groups while the mode of provided input differed. Clearly, the benefits of adding background music during learning are numerous and apply to more than just musical intelligence. The implementation of music, would help students to enhance their overall intelligence (Bryant-Jones, Shimmins, & Vega, 2003, p 28) and Bird (2017) found that Instrumental versions of modern songs can calm students when they are feeling anxious.

The two types of inputs utilized in this research were baseline which was not modified and pre-modified input applying techniques such as slower speech, cleverer articulation, and emphatic stress, paraphrases, synonyms, restatements, (Parker and Chaudron, 1987, p 110) implemented in the instruction of the reading tasks to the participants of the study while exposed to background instrumental jazz songs. Through the precise comparison of the experimental groups it was clearly seen that pre-modified input helped learners to reduce their level of reading anxiety more than baseline input. Of course the data illustrated that both experienced had experienced a decrease in their level of anxiety, since as compared to the original mean of 65.51 and 75.00 in the reading anxiety pretest, they had scored a mean of 61.89 and 64.86 on their posttest.

This result can be useful and beneficial for teachers in order to reduce the reading anxiety level of their students through paraphrasing and modifying of any reading task based on the level of learners. Moreover, the playing of background music can also be suggested irrespective of the type of input.

Pre-modified input worked better rather that baseline input on the reading anxiety of learners in this study. In some ways this research can support Ellis, Tanaka and Yamazaki (1994) studies in which pre-modified group acquired better comprehension than baseline group and MacKay (1999), who operationalized pre-modified input as a kind of input which is targeted at the level of the learner to facilitate language comprehension.
The null hypothesis of the study was rejected (\(p=.002<.05\)) proving that the students in the pre-modified group had outperformed the baseline group significantly and had shown lower anxiety although both groups had shown a lower level of anxiety in comparison with the pretreatment stage.

Having the knowledge of input in different tasks and being able to modify them based on the level of learners cannot only be useful for English teachers in the classroom, but also to the Ministry of Education especially to language planners in their decision making. This study can also contribute to the research literature in the field of second language acquisition.

Furthermore, reviewing the management-education literature affirms the obtained result of growing awareness of inputs, and its effectiveness in curriculum design, student assessment, curriculum development, supporting learners to enhance the complexity of their critical thinking.

Gass (1997, P. 1) believed that “the concept of input is perhaps the single most important concept of SLA Language input can be a key way for language acquisition so we should stress the importance of modification, clarification and paraphrasing of different tasks which can be done by teachers in language learning and teaching. This study does provide sufficient evidence that students have different levels of reading anxiety based on the input they receive.

From what the researcher witnessed, Pre-modified input worked better than baseline input on the reading anxiety of learners in the classroom as the learners were more laid back and motivated to read the texts and had more incentive to engage in reading activities. In many cases they themselves cooperated in the modification of input which was a good sign of autonomy and interest. Inasmuch as they got involved in input modification, the learners seemed to be more motivated and showed greater incentive to embark on the task of reading. In some ways this research supports Ellis, Tanaka and Yamazaki (1994) studies in which pre-modified group acquired better comprehension than baseline group.

Further studies can be done by researchers about other different types of input such as interactionally modified input or modified input not only on reading anxiety of learners, but also on some other aspects of anxiety such as classroom anxiety or listening anxiety. In this research the instrumental jazz music was played equally in both groups. As Bird (2017) found that instrumental versions of modern songs can calm students when they are feeling anxious, further studies can be conducted in order to see whether music can have positive effect or negative effect when there is instrumental songs in one group with specific type of input and no music in another group with the same input on different kinds of anxieties. As music has always been a vast and controversial subject in SLA, other genres of music whether instrumental or not can be added. On the whole, the role of music on EFL learners and learners in general belonging to any age group is an undeniable fact and the utilization of this incentive while the input is presented is very likely to be beneficial in the modern classrooms. The learners in this study showed positive attitude towards the background music and were generally more relaxed and interested in the
classroom process and enjoyed the variety that the music introduced in their routine educational setting.

References


Arash A. (2016). Effects of Non-negotiated Pre-modified Input, Negotiation of Input without Output, and Negotiation of Input plus Pushed Output on EFL Learners’ Vocabulary Learning.

Azizah R. (2012). The 8th International Language for Specific Purposes (LSP) Seminar


Sakineh S & Mohammad R. (2014). The Effect of Background Music While Silent Reading on EFL Learners’ Reading Comprehension.


