Bilingualism and Vocabulary Learning: A Comparison between Baluchi and Persian EFL Learners

Yahya Keikhaie *
University of Sistan and Baluchestan

Amirali Khoshkhoonejad **
University of Sistan and Baluchestan

Noorullah Mansoorzadeh
University of Sistan and Baluchestan

Essa Panahandeh
University of Sistan and Baluchestan

Abstract
Bilingualism can be broadly defined as the ability to speak two languages; however, there are many grey areas when establishing which are the first language, the second language, and the third language of a bilingual. The paper reports on a study exploring the effect of bilingualism on the learning of a vocabulary learning of two groups of Iranian male students: Baluchi bilinguals and Persian monolingual. The present study is based on the data from 80 monolingual Persian-speaking learners of English and 80 bilingual Baluchi-Persian-speaking learners of English. All participants were male studying English as a foreign language at pre-university of Sistan and Baluchestan in Iran. The results indicated that Baluchi-Persian bilingual speakers outperformed in general vocabulary learning and in L3 recognition vocabulary learning. The findings of this paper also showed that no significant difference was seen between Persian-speaking learners and Baluchi-Persian-speaking in L3 production vocabulary learning (p>0.05).

Keywords: Bilingualism, Vocabulary learning, Baluchi-Persian Bilinguals (BPBs), Persian monolinguals (PMs)

* Yahya Keikhaie, Assistant Professor, University of Sistan and Baluchestan, Zahedan, Sistan Va Baluchestan, Iran
E-mail: Keikhaie@hamoon.usb.ac.ir

** Amirali Khoshkhoonejad, Phd Student, University of Sistan and Baluchestan, Zahedan, Sistan Va Baluchestan, Iran
E-mail: ali.z.khooshkhoonjad@gmail.com

Received March 20, 2015; Revised June 3, 2015; Accepted June 20, 2015
Introduction

Vocabulary learning and production are critical features in language development. Accordingly, during the past decade, the importance of vocabulary acquisition for second language learners has been pointed out by many researchers and theorists. Learning vocabulary is a central part of mastering a second language (Schmitt, 2008) and it has been one of the challenging subjects in second language acquisition. There is agreement among vocabulary specialists that lexical knowledge is the heart of language learning (Coady, 1997; Coady and Huckin, 1997). Words are the building blocks of a language since they label objects, actions, ideas without which people cannot convey the intended meaning. The significant role of vocabulary knowledge in second or foreign language learning has been recently recognized by theorists and researchers in the field. Therefore, numerous types of approaches, techniques, exercises and practices have been introduced into the field to teach vocabulary (Hatch & Brown, 1995). It has been suggested that teaching vocabulary should not only composed of teaching specific words but also aim at equipping learners with strategies necessary to expand their vocabulary knowledge (Hulstijn, 1993, cited in Ghazal, 2007).

On the other hand, Bilingualism can be broadly defined as the ability to speak two languages; however, there are many grey areas when establishing which are the first language, the second language, and the third language of a bilingual. Bialystok (2001) believes that "views vary from Bloomfield's (1933) insistence that a bilingual has full fluency in two languages to the more pragmatic ascertain by Grosjean (1989) that a bilingual is someone who can function in each language according to given needs" (4). Nevertheless, according to Bialystok (2001: 5) "we think of bilingual individuals as those people who are able to speak two (or more) languages, to some level of proficiency, but identifying what counts as a language is not a straightforward judgment.

Bilingualism can be observed everywhere in the world. There are many reasons that fostering bilingualism. Some of them are various kinds of migration, intermarriages and educational/vocational opportunities. It is said that-more than half of the world’s population is bilingual and two thirds of the world’s children grow up in a bilingual environment (Crystal, 1997).

Although Persian language is the official in Iran, the other languages like Turkish, Kurdish, Arabic, Baluchi and Armenian are spoken by minority groups in different parts of the country. As already mentioned, Baluchi is also one of the languages spoken in Iran. Baluchi speakers mainly reside in Sistan & Baluchestan province in the east of Iran. Sistan and Baluchestan province with a population of more than two and a half million people is one of the most popular provinces of Iran.

The purpose of current study is to examine the effect of bilingualism on vocabulary learning between two groups of Iranian male students: Baluchi bilinguals and Persian monolingual.

Research Questions and Hypothesis

Within this framework, the present paper tries to find answers to the following questions:

RQ1. Do Baluchi-Persian bilinguals (BPBs) generally outperform Persian monolinguals (PMs) in English vocabulary acquisition?

RQ2. Do Baluchi-Persian bilinguals outperform Persian monolinguals in both recognition and production vocabulary?

The above mentioned research questions are the basis for the following null hypotheses:

H0. Baluchi-Persian bilinguals (BPBs) do not outperform Persian monolinguals (PMs) in English vocabulary acquisition.

H0. Baluchi-Persian bilinguals do not outperform Persian monolinguals in both recognition and production vocabulary.

Previous studies

Keshavarzand Astaneh (2004) studied the effect of bilingualism on third language vocabulary learning of three groups of bi/monolingual female students (Turkish-Persian bilinguals, Armenian-Persian bilinguals and Persian monolinguals) in two regions of the country. The results of the study showed that the subjects’ bilingualism has a positive effect on third language vocabulary learning.

Modirkhamene (2006) examined the effects of bilingualism on third language learning among English as Foreign Language (EFL) learners with a focus on reading comprehension proficiency. It compared 56 Turkish–Persian bilinguals with their 42 Persian monolingual peers in terms of their performance on the First Certificate of English (FCE) tests of reading comprehension in three phases. The results indicated that bilinguals performed significantly better than monolinguals in the reading comprehension tests in all the three phases of investigation; thus, strengthening the argument that bilingualism may be a good predictor of achievement in learning a third language.
In another study, Dibaj (2011) conducted a research to investigate the effect of bilingualism on the performance of 52 monolingual Persian-speaking learners of English with 45 bilingual Azari-Persian speaking learners of English in English vocabulary learning. All the participants were female that studied English as a foreign language at two universities in Iran. The informants are given two incidental and four intentional vocabulary learning exercises. They were evaluated at four difficulty levels using the Vocabulary Knowledge Scale. The results showed that bilingual language learners outperformed their monolingual counterparts at all word difficulty levels.

Kassaian and Esma’li (2011) did a research to explore the effect of bilingualism on third language breadth of vocabulary knowledge and word reading skill. 30 female Armenian-Persian bilinguals and 30 female Persian monolingual participants in this study. The Nation’s vocabulary levels test and Burt word reading test, respectively, were used to measure subjects’ knowledge of vocabulary and their word reading skill. After computations, they concluded that bilingualism is highly correlated with breadth of vocabulary knowledge and reading skill.

Merrikhi (2012) investigated the effect of bilin gualism on the grammar proficiency of three groups of Iranian pre-university female students: two composed of Azeri-Turkish bilinguals and Armenian bilinguals the other, of Persian monolinguals. The finding of this study revealed that bilinguals definitely outperformed monolinguals on the English Grammar and Armenian’s group did better than Azeri-Turkish bilinguals.

Zare and Davoudi Mobarakeh (2013) compared 50 Arabic-Persian bilinguals with Persian monolinguals in the learning of English vocabulary. 50 male Arabic-Persian bilinguals and 50 male Persian monolinguals participated in this study. Firstly, a questionnaire through which mono/bilingualism and proficiency level in the language skills were asked was given to students. Then a list of English words was presented to the students and they were requested to write the meaning of words they knew. For homogeneity purpose, Oxford Placement Test (OPT) was also used. After taking the pre test, students received the treatment. Finally, post test was run. Results of three T-tests showed that APBs in general and in L3 production vocabulary learning outperformed their PMs. The finding also indicated that no significant difference was seen between APBs and PMs in L3 recognition vocabulary learning.

Method

Participants

One hundred and sixty male students who are in their third grade, in senior high school took part in this study. All students were from Zahedan, a city in a Sistan and Baluchestan province. 80 were bilinguals Baluchi-Persian (group A) and the remaining 80 were monolinguals Persian only (group B). Students of group A were studying Persian and English Academically and the only place they used Persian was at school and the rest of their daily communication was mostly done via Baluchi. The age range was between 17 to 18. Furthermore, all participants had experience of at least 5 years of studying English at school. The homogeneity of the participants on L3 proficiency was achieved through OPT.

Instruments

Three instruments were used in this study:
1. Questionnaire and list of words
2. English proficiency test
3. Vocabulary Test

Questionnaire

A questionnaire was used in this study to recognize what the subjects’ mother tongue is and how well they knew the four main language skills: speaking, listening, writing and reading. This questionnaire consists of 20 items. Participants were expected to name the languages they know and specify their proficiency in each of the skills on a five-Likert Scale ranging from: 1. Very little, 2. little, 3. moderately, 4. very well, 5. fluently (9, 10, 11, 12, 13, 14, 15, 16, 17). The questionnaire prepared originally by Pilar and Jorda (2003) and later adjusted by Dibaj (2011) in EFL context of Iran. To have a better picture of the context in which subjects were learning third language, the questionnaire also asked the educational level and occupational background of informants’ parents (questions 18, 19, 20) as well as the city from which they come. Dibaj (2011) designed the questionnaire in Persian to ascertain that the subjects were able to understand it.

Furthermore, a list of 70 words which was selected from the book “intermediate vocabulary” by B.J. Thomas (1995) was given to students and they were required to write the meaning of the words
they knew in Persian. These words were extracted by Zare and Davoudi Mobarakeh (2013). The book was composed of 70 different units. Due to the full coverage of this book, one word from each unit was randomly selected. Of these 70 words, 50 words which none of the students knew their meanings were taught to students in five weekly sessions (10 words a session). Two groups were taught by the same teacher. The words were taught as part of the conventional vocabulary section of the textbook students had to pass during the academic year.

**English Test - Beginner (proficiency test)**

To make sure of the homogeneity of the learners' English proficiency, we used English Test-Beginner Proficiency Test developed by William Bertrand to evaluate the participants. The purpose of using this test was to feel certain that the participants in both group (A & B) had an equivalent level of English language proficiency. The test composed of 100 multiple choice items. The learners were given enough time to answer the questions. In order to estimate how reliable the use of the proficiency test is, it was administered to the pilot group of eighty students in Zahedan who were at the same level (level 2) with the participants of the present study. For the computation of the internal consistency of the test, KR-21 formula was used. The reliability index for the English Test-Beginner Proficiency Test in this study was found to be 0.83, which is considered a positive reliability.

**Vocabulary test**

As previously stated, in this study 50 words were selected from the book “intermediate vocabulary”. The test was originally composed of 15 multiple-choice recognition items and 15 production items in which participants were asked to define words as they were taught and presented in the book and classroom. The test was piloted with 40 students (20 BPBs and 20 PMs) who had similar characteristics (in the same school and in the same grade) as target participants. After piloting the test, five problematic items from each section (recognition and production) were omitted. Therefore the pre/post test consisted of 10 multiple-choice recognition items and 10 open-ended production items. The overall internal consistency of the questionnaire was determined by Zare & Davoudi Mobarakeh (2013) and turned out to be 0.88 which is an acceptable and high index of reliability.

**Procedure**

Initially a 20-item questionnaire was given to 100 participants for homogenizing students' vocabulary knowledge. Through questionnaire, bi/mono bilingualism of the students was revealed. Along with the questionnaire, a list of words was presented to students and consequently (TOEFL test) was administered to ascertain that participants are of the same level of background knowledge. Then, the participants in both groups took the pre test.

The purpose of the pre test was to assess the students’ knowledge of these words before the treatment. Then the vocabularies were taught to the students by the same teacher and through the same method. 10 words were taught session. Two weeks after instruction was finished, students took the post test. Finally the performance of both groups on pre/post test was statistically studied to see whether there was any significant difference between BPBs and PMs in general, receptive and productive vocabulary learning.

To analyse the collected data in order to examine the research hypothesis and answer the research question the researchers marked the tests and results were submitted to SPSS21 for statistical analysis. To answer the first research question which was whether BPBs generally outperform BMs in English vocabulary acquisition, an independent sample T-test was used to compare the general performance of the participants.

To have answer to the second research question which was whether BPB out perform PMs in recognition and production vocabulary, two separate T-tests were run, in one of which the performance of both groups on recognition items was studied and in the other T-test we compared the participants’ scores on productive vocabulary section.

**Results**

In order to make sure that all the participants are at the same level of language proficiency, English Test-Beginner Proficiency Test was administered at the very beginning to the both groups. After gathering the data, the descriptive statistics was produced by SPSS program. The descriptive statistics of proficiency test for both groups are shown in Table 1.
Table 1. Independent samples t-test: Monolingual group proficiency test vs. Bilingual group proficiency test

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min score</th>
<th>Max score</th>
<th>F</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficiency Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual</td>
<td>80</td>
<td>42.1</td>
<td>8.62208</td>
<td>30</td>
<td>61</td>
<td>.017</td>
<td>-1.188</td>
<td>158</td>
<td>.061</td>
</tr>
<tr>
<td>Bilingual</td>
<td>80</td>
<td>44.7</td>
<td>8.7171</td>
<td>30</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 1 shows, there was no statistical difference between groups, \( t (158) = -1.188, p < 0.5 \). As a result, no significant differences were observed between the learners' mean score in the proficiency test within the monolingual and bilingual groups; therefore, the participants of the monolingual and bilingual groups were homogeneous.

In order to test the first null hypothesis, independent sample T-test was run to compare the two groups' performance on general vocabulary learning. In the following lines, the data analyses and results are presented in Table 2.

Table 2. Independent samples t-test: Monolingual general vocabulary learning vs. Bilingual general vocabulary learning

<table>
<thead>
<tr>
<th>Vocabulary Learning in General</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min score</th>
<th>Max score</th>
<th>F</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td>80</td>
<td>11.80</td>
<td>2.90961</td>
<td>7</td>
<td>17</td>
<td>.166</td>
<td>-3.752</td>
<td>158</td>
<td>.000</td>
</tr>
<tr>
<td>Bilingual</td>
<td>80</td>
<td>13.57</td>
<td>3.07</td>
<td>9</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it is demonstrated in the Table 2, bilingual group have outperformed their monolingual counterpart in general vocabulary learning. A difference of approximately two points is observed in the mean score.

Another Independent-samples t-test was computed to identify whether there was any difference between participants’ performance on recognition of vocabulary learning. In recognition test which was consisted of 10 multiple-choice items, students in both groups demonstrated roughly the same knowledge of vocabulary. The obtained results are represented in Table 3.

Table 3. Descriptive statistics for recognition section of the test

<table>
<thead>
<tr>
<th>Recognition</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min score</th>
<th>Max score</th>
<th>F</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td>80</td>
<td>6.35</td>
<td>2.05679</td>
<td>2</td>
<td>2</td>
<td>3.84</td>
<td>-4.052</td>
<td>158</td>
<td>.000</td>
</tr>
<tr>
<td>Bilingual</td>
<td>80</td>
<td>7.56</td>
<td>1.71253</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 3 indicates, students had a good command of recognizing the correct word; nevertheless, BPs were better with an average of 7.56 (of 10) versus 6.35 of Ps.

Furthermore, an independent-samples t-test was conducted to compare the production of vocabulary learning scores for bilinguals and monolinguals. Table 4 shows the results of the mentioned analysis.

Table 4. Descriptive statistics for production section of the test

<table>
<thead>
<tr>
<th>Production</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min score</th>
<th>Max score</th>
<th>F</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td>80</td>
<td>5.45</td>
<td>1.82736</td>
<td>2</td>
<td>2</td>
<td>.189</td>
<td>-1.950</td>
<td>158</td>
<td>.664</td>
</tr>
<tr>
<td>Bilingual</td>
<td>80</td>
<td>6.025</td>
<td>1.90253</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 4, the results of another T-test investigating the students’ knowledge of production vocabulary have been presented.
Discussion

The finding of this study revealed that Baluchi-Persian speakers generally outperformed their second language L2 in vocabulary learning versus Persian counterparts. Table 2 shows that there was a significance difference in scores for bilinguals (M=13.57, SD=3.07,) and monolinguals (M=11.80, SD=2.90961). The results indicated the fact that Bilinguals have generally had a better performance in vocabulary learning and it implies that Baluchi-Persian bilinguals presumably take advantage of knowing two languages in learning third language through associating third language words with related concepts and words in first and second language, whereas Persian monolinguals can only resort to their first language.

On the other hand, based on Table 3, the mean score for Baluchi-Persian bilinguals, on average, obtained approximately 1.2 scores higher than Persian monolinguals, and p<.05. This means that there is a significant positive correlation between recognition of vocabulary learning and bilinguality of the participants. In other words, Baluchi-Persian bilinguals had better performance in recognition of vocabulary learning.

Furthermore, according to the results shown in Table 3, there was no significant difference between Baluchi-Persian bilinguals and Persian monolinguals in production of vocabulary learning (p>.05). The most important point perceived from Table 3 is that both groups have an average in production of the words. Subsequently, it is implied that what distinguishes bilinguals and monolinguals in third language learning lies in recognition part.

These findings are consistent with Keshavarz and Astaneh (2004), Modirkhameneh (2006), Dibaj (2011) and Zare & Davoudi Mobarakhe (2013). Keshavarz & Astaneh found that the Azeri-Persian speakers outperformed their Persian counterparts on a CPAT at the 2000 and 3000 word levels. Furthermore, Modirkhameneh concluded that the Azeri-Persian speakers had better performance versus their Persian counterparts on the First Certificate English (FCE) tests of reading comprehension. The results were also similar to those obtained by Dibaj (2011). In that study, the Azeri-Persian speakers who were only orally proficient in the two languages outperformed their L2peers in learning the target words at all four difficulty levels. Moreover, the results of the present study are in line with Zare & Davoudi Mobarakhe (2013) who have shown that bilingualism results in more efficient foreign language learning.

The current study examined the effect of bilingualism on the learning of a vocabulary learning of two groups of Iranian male students: Baluchi bilinguals and Persian monolingual. Other researchers may find it interesting to get insights into the effects of bilingualism between two different bilingual society such as Azari-Persian bilinguals and Baluchi-Persian bilinguals. The study can also be replicated in a different context with a larger number of students to see whether the similar results can be obtained or not.

Acknowledgement

We wish to thank all those students who helped us complete the questionnaires. Without their continued efforts and support, we would have not been able to terminate it successfully. The authors would also like to appreciate the Editor- in- Chief and the reviewers whose general and specific constructive suggestions contributed the value of this manuscript.

References


