The Effect Of Bilingualism On The Developing Of English Reading Skill
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Abstract

Reading skill has been noticed by majority of Iranian English teachers and learners because of its importance in promoting language use and success in understanding authentic materials. Due to this fact that bilingualism and multilingualism have been increased around the world, most of the researchers investigated the impact of bilingualism in learning English. The aim of this study is to find the effect of bilingualism on learners reading ability. To this end, 60 female students from a secondary school in Kouhdasht, Iran, were selected, and assigned to two homogeneous groups of bilingual (Laki-Persian) and monolingual (Persian). During 12 sixty-minute sessions within eight weeks, both group practiced reading through extensive, intensive reading and summarizing. After treatment the result revealed that reading skill was statistically significant in bilingual students, in comparison with monolingual counterparts. The findings of this study have various implications for language teachers and policy makers to provide bilingual students with optimal teaching and learning opportunities.

Keywords: Bilingual; monolingual; reading skill; intensive study; extensive study

1. Introduction

Nowadays the numbers of people that are able to speak more than one language have been increased in so many parts of the world. According to (Trask, 1999) about 70 percent of the people in the world are bilingual. This demonstrates the necessity of investigating the role of bilingualism in the process of teaching and learning a foreign language. Across other countries in the world the bilingualism phenomenon is exist in, Iran. Furthermore there are variety of language and dialect in different parts of the country. So there might be differences between monolingual and bilingual students in learning foreign language. English is a foreign language in Iran and learning a foreign language to communicate with other countries is an essential issue in a developed country.

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Of all four main skills of learning, reading has an important role in learning and understanding the authentic materials. In an EFL context that individual doesn't have opportunity for oral communication and contact with natives, reading can play an important role to promote learning. In this case selecting suitable, adequate and more efficiently material can enhance language use.

Recently researchers have tried to find the role of intensive and extensive reading in reading and second language acquisition (SLA). According to (Palmer, 1964) in extensive reading, the learner reads rapidly for getting information and pleasure, without any notice to meaning and linguistic features. So it is a “supplementary reading”. Also he (1921) noted that in intensive reading the learners study the passage carefully and notice to grammatical point of the text.

According to (Carrell et al., 1997), in extensive reading students read longer contents to know the gist and essential parts of the text rapidly without any effort to recognize the structure. So, in learning to read extensively learners obtain a large amount of materials. Moreover, (Harmert, 2001) stated that the teachers play crucial role in teaching extensive or intensive reading. In former teacher encourage students to read for pleasure to enhance their general knowledge and in the latter, aims to develop their skills. (Paran, 2003) stated that extensive reading is not enough “for developing reading skill, and a more focused approach, including explicit instruction is also needed; it deals with more detailed comprehension and has an important role in teaching reading strategies. (p.40)

Various studies have shown that students' reading can be developed by using the explicit instruction, and reading skills such as decoding and fluency (Colina and et al, 2001; Denton and et al. , 2004; Klinger and et al., 2006). (Gottardo, 2008) stated that bilingualism is a complex phenomenon that factors such as the age, first language, environment and situation can influence it. Bilingual students have different mental abilities and greater cognitive flexibility in contrast to monolingual students ( Peal and Lambert,1962).

(Corder, 1979) suggests that because bilinguals have some opportunities so they can make comparison between two languages; this is a facilitator factor and an asset for them on learning a new language. Consequently, bilinguals can benefit this asset to generate the new language's structure and learn more efficiently. The study that conducted by (Thomas, 1988; Valencia & Cenoz, 1993) showed that bilingual students have a superiority in learning foreign language in contrast to monolingual students. (Thomas, 1988) stated that bilinguals are more sensitive to language system and can act more efficiently in formal learning compared with monolinguals.

(Bialystok, 2001) manifested high metalinguistic awareness of bilingual students. She found that bilingual students were more fluent in judging the grammaticality of sentences than monolingual. They could perform the switching task more rapidly than monolinguals. (Lambert and Tucker, 1972) stated that bilinguals can make comparison between two languages to promote their metalinguistic ability. (Keshavarz & Astanef, 2004) conducted a research that showed bilingual students (Turkish-Persian bilinguals, and Armenian-Persian bilinguals) were more successful in learning vocabulary than Persian monolingual students. (Kassaian and Esmae’li, 2011) in study with 30 female Armenian-Persian bilinguals and 30 female Persian monolinguals at two different pre-university centers of Esfahan (Iran) proved that bilingualism is highly correlated with breadth of vocabulary knowledge and reading skill. Also, (Errasti, 2003) emphasized effects of bilingualism on L3 writing skill. (Hunt and Isaakidis, 2004) point out those bilinguals use their metalinguistic awareness and learn more efficiently target language than monolinguals.

Some previous studies have showed a significant relationship between working memory and reading comprehension. According to (Kalibatseva and Jungers, 2009) bilinguals students require high working memory and appropriate skills in their first language in reading performance in their L2 due to it's different in bilinguals. According to (Hakuta and Diaz, 1985) there is positive relationship between bilingualism and non-verbal intelligence. (Gough & Tunmer, 1986) claimed that reading comprehension skill of English-language learners (ELLs) is best predicted by association of decoding and linguistic comprehension and their cross-product. (Nagy et.al, 1993) conducted a research (consist of 74 upper-elementary Spanish-English biliterate students) and found positive relationship between recognizing Spanish language cognates and English reading comprehension.

The National Literacy Strategy recognized that identifying “points of similarity and differences between languages at word, sentence and text level” (1998, p 107) helps the bilingual learner, who mostly is able to recognize the way different language systems operate (Kenner 2000). Also, some studies in the literature indicate a negative role of bilingualism in teaching and learning second language. According to (Hernandez, 1997) bilingualism can impact the process of reading in comparison to monolingual children. (Gelderen et al., 2003) claimed that Dutch monolinguals and Turkish or Moroccan-Dutch bilinguals in reading comprehension of L3 were
weaker than monolinguals. Others such as (Sanders and Meijers, 1995) by comparing Dutch monolingual speakers with Turkish- Dutch and Moroccan-Arabic bilingual found no significant differences between bilinguals and monolinguals students in learning a foreign language. They mentioned that bilingual student's mother tongues were in a lower position than their second language.

In Iran some of the provinces have its own dominant cultural-linguistic group, but the official instructional language is Farsi. However, children didn’t receive education in their native language such as Turkish, Kurdish, Lori, Laki, Baluch, Arabic, so it can create a problem of bilingualism of home and school for the non-Persian speaking students. It leads to subtractive bilingualism that is learning second language in expense of L1 in contrast to additive bilingualism that language and culture are added to L1 as a complement to promote and develop each other. According to (Karimi, 2003) the international reading comprehension study of 1970 showed that Iran ranked 14th among fifteen participating countries, and in PIRLS 2001, 32nd among the 35 participating countries. Furthermore Iranian bilingual students got lower scores than monolingual in reading comprehension test (Karimi and Kabiri, 2011).

According to (Arefi and Alizadeh, 2008) bilingual students in Iran educating in a subtractive bilingual programs that doesn’t help them to develop cognitive development. They infer that in this situation bilinguality doesn’t mean having higher cognitive ability. Only balanced bilingual students with (high level) of proficiency, can benefit from positive effects of bilinguality. (Khadivi, 2011), and "decontextualized language skills" cannot develop reading skill (Snow, 1987).

As it was stated above, though many studies have been done on the role of bilingualism in learning foreign language such as vocabulary, grammar, reading, and word cognition, very few if any can be found to have investigated the role of bilingualism in an inclusive study in Iranian context. The aim of this study is to investigate the effect of bilingualism on the developing of English reading skill. The results could shed light on the issue of bilingualism and L2 reading skill. So the research question of this study is:

1. Is there any significant difference between the bilingual students’ and the monolingual students’ reading ability?

2. Does bilingualism of students affect their reading skill?

2. Methodology

2.1. Participants

Two groups of female students, with monolingual (Persian) and bilingual (Persian-Laki) background at two pre-university schools (30 students in each group) of Kouhdasht city in lorestan province, Iran, selected by the researcher. The student's age ranged from 17 to 18. They have been selected according to the information that the subject indicated in the questionnaire. The subjects in both groups were homogenous regarding teacher, time allocated to teaching (60 minutes) in each session, their age (17-18), methodology (in both group the teacher used extensive and intensive reading instruction), and context.

2.2. Instrumentation

The researcher used two instruments in this study to measure reading ability of the learners. The first instrument was the Cambridge Preliminary English Test (PET) to show that the participants belong to same group that is available online. The test is used by teachers and researchers to measure general proficiency of the learners in intermediate level. The reliability of the test computed by cronbach’s alpha was (0.80) that is high reliability. Another instrument that have been used in pretesting learners was teacher made reading comprehension passage, consisting five passages and each passage had six multiple-choice questions. Researcher piloted these multiple-choice test before administrating that its' reliability was (0.85) and two experts revised that to prove its' validity. To attribute further changes in learners reading ability to their bilingualism or monolingualism of the learners and teacher treatment, researcher administrated these tests to participants to insure that they are in the same group. Researcher selected some variety of reading topics from CNN Learning Resources to teach them in the classroom
that are available online. The readability of these texts was computed through Microsoft Office Flesch Reading Ease (71.1) that was close to their text books (74.2).

2.3. Procedure

2.3.1. Pre-test

To find that the learners were homogenous in general language ability and reading comprehension, researcher administered the test and the scores were one standard deviation below and above the mean. The pre-test scores revealed that the students were homogenous in their reading ability.

2.3.2. Treatment

The learners in both bilingual and monolingual group were under treatment for eight weeks, 12 sixty -minute sessions. The researcher taught them in the classroom using textbooks, extensive and intensive reading, and summarizing. They studied reading passages, and then guided to do different activities, such as comprehension questions, quizzes, and vocabulary tests and write a summary of the passage.

2.3.3. Post-test

Researcher conducted the reading test which is the same for both group to find that is there any significant differences between two groups regarding their language and treatment.

2.4. Data Analysis

After the administration of the tests, they were scored by the researcher and the results were submitted to statistical analysis (v.16). Regarding the first research questions, i.e. the relationship between bilingualism of the participants and reading skill, Bivariate Correlation was used. Correlation analysis is used to describe the strength and direction of the linear relationship between two variables. Considering the impact of bilingualism of the participants on their reading skill, independent-sample T-test was used to determine if there was any difference in the mean score of each group in terms of their pre and post-tests (using paired sample analysis by SPSS). As well as, the researcher used t-tests to determine the differences between the two groups both in their pre and post-tests.

3. Results

First, the researcher used to determine any pre-existing differences between the means of two groups. The results are presented in table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test of Monolinguals</td>
<td>30</td>
<td>19.233</td>
<td>3.87462</td>
<td>.70740</td>
</tr>
<tr>
<td>Pre-test of Bilinguals</td>
<td>30</td>
<td>20.533</td>
<td>3.96305</td>
<td>.72355</td>
</tr>
</tbody>
</table>

The results indicated that the mean score of the pre-tests of monolingual group ($M =19.23$, $SD =3.87$) and bilingual group ($M =20.53$, $SD =3.96$), $t (29) =-1.18$.) are not noticeably different and they are close to each other. The mean difference scores was -1.3 with a 95% confidence interval ranging from -3.54 to 0.94. So, here one can say that the groups are homogeneous in terms of reading comprehension; that is, the results of the mean of the differences of the means of the pre-tests of two groups did not reveal any significant differences (Table.3).
Table 2: Paired Samples Correlations

<table>
<thead>
<tr>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>-0.177</td>
<td>0.350</td>
</tr>
</tbody>
</table>

Table 3: The results of the t-tests for the two groups (pre-tests)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Conf. Interval of the difference</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.30</td>
<td>6.01234</td>
<td>1.09770</td>
<td>Lower -3.54505 to Upper .94505</td>
<td>-1.184</td>
<td>29</td>
<td>0.246</td>
</tr>
</tbody>
</table>

Checking obtained t-score in t-table reveals that the difference between the means of the two groups is not statistically significant with 95% Confidence Interval of the Difference (p<.05). Therefore, the present researcher was confident that the two groups are homogeneous to start with and any subsequent differences can be attributed to the treatment that they would receive. The results of the comparison of the post-tests of the two groups after three months of treatment are presented in tables (4 & 6).

Table 4: The comparison of the mean of the two groups (post-tests)

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test of Monolinguals</td>
<td>30</td>
<td>20.6667</td>
<td>3.78138</td>
<td>.69038</td>
</tr>
<tr>
<td>Post-test of Bilinguals</td>
<td>30</td>
<td>24.2000</td>
<td>3.50763</td>
<td>.64040</td>
</tr>
</tbody>
</table>

Table 5: Paired Samples Correlations

<table>
<thead>
<tr>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>-0.234</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Table 6: The results of the t-tests for the two groups (post-tests)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Conf. Interval of the difference</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3.53333</td>
<td>5.72793</td>
<td>1.04577</td>
<td>Lower -5.67218 to Upper -1.39449</td>
<td>-3.379</td>
<td>29</td>
<td>0.002</td>
</tr>
</tbody>
</table>

As is evident from Table 4 and 6 there is a statistically significant difference between the mean of monolingual group (M =20.66, SD =3.78) and bilingual group (M =24.2, SD =3.5), t (29) =-3.37 in their post-test performance at p<.05 level. The mean difference scores was -3.53 with a 95% confidence interval ranging from -5.67 to -1.39. Therefore it can be claimed that bilingualism was more effective in promotion of students reading ability. In other
words, bilingual students' mean score in post-test was more than monolingual students' mean score.

The researcher also conducted a paired t-test between the mean of pre-and post-tests of each of the groups to see whether the differences between the means are significant or not. The results showed significant differences between the mean of pre- and post tests of each of the groups (Table 7 to 9) indicating that both of the groups have actually improved significantly.

Table 7. Comparison of the means of pre- and post-tests of Monolingual group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test of Monolingual</td>
<td>30</td>
<td>19.2333</td>
<td>3.874662</td>
<td>.70740</td>
</tr>
<tr>
<td>Post-test of Monolingual</td>
<td>30</td>
<td>20.6667</td>
<td>3.78138</td>
<td>.69038</td>
</tr>
</tbody>
</table>

The results illustrated in Table 7 and 9 indicate that the mean differences between pre and post test are significant. There was a statistically significant increase in scores from pre-test \((M=19.23, SD=3.87)\) to post-test \((M=20.66, SD=3.78)\), \(t(29)=-10.14\). The mean increase of the scores was -1.43 with a 95% confidence interval ranging from -1.72 to -1.14.

Table 8. Paired Samples Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pre-Test of Monolingual group &amp; Post-Test of Monolingual group</td>
<td>30</td>
<td>.980</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 9. Paired sample t-test for Monolingual group

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95 %Confidence Interval of the difference</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test monolinguals &amp; Post-test monolinguals</td>
<td>-1.43333</td>
<td>.77385</td>
<td>.14129</td>
<td>-1.72230 -1.14437</td>
<td>-10.145</td>
<td>29</td>
<td>.000</td>
</tr>
</tbody>
</table>

Regarding the Bilingual group, as is clear from paired-samples T-Test in tables 10, and 12, there was a statistically significant increase in scores from pre-test \((M=20.53, SD=3.96)\) to post-test \((M=24.20, SD=3.50)\), \(t(29)=-14.36\). The mean decrease the scores was -3.66 with a 95% confidence interval ranging from -4.18 to -3.14. Hence, the differences are significant and these changes in the mean provide the evidence to show that Bilinguals' scores were more significant than Monolingual's scores in reading comprehension.

Table 10. Comparison of the means of pre- and post-tests of Bilingual group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test of Bilinguals</td>
<td>30</td>
<td>20.5333</td>
<td>3.96302</td>
<td>.72355</td>
</tr>
<tr>
<td>Post-test of Bilinguals</td>
<td>30</td>
<td>24.2000</td>
<td>3.50763</td>
<td>.64040</td>
</tr>
</tbody>
</table>

Table 11. Paired Samples Correlation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pre-Test of Bilingual group &amp; Post-Test of Bilingual group</td>
<td>30</td>
<td>.937</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 12. Paired sample t-test for Bilingual group

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95 %Confidence Interval of the difference</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
</tbody>
</table>
In sum, it is obviously the case that both of the groups reading comprehension abilities increased via treatment. Considering the results of these tables (10 & 12) in post-tests, it can be revealed that Bilinguals' reading is more significant than Monolinguals' reading. In other words, Bilingual students can benefit from their first language as an asset in reading comprehension.

4. Discussion and Conclusion

Researchers have found evidence of no target language activation during reading (Dijkstra et al., 1999, 2000b) that may give advantages to bilinguals than monolinguals. Also, reading skill has been noticed by majority of Iranian English teachers and learners because of its importance in promoting language use and success in understanding authentic materials. In this study, the sample we used for the first time was done on students with "Laki" as second language. Having presented the results of the study, the researcher discusses the findings of the study, in order to answer the research questions. According to the results shown in Table 4 and 6 one can understand that there is a significant difference between the monolingual and bilinguals subjects' of reading comprehension. This is maybe because of their different mental abilities and greater cognitive flexibility to make comparison between two languages to read more efficiently in contrast to monolingual students. In other words, the bilingual subject's first language plays a crucial role in their performance, reading ability, and learning a foreign language. Furthermore, results showed in Table 10 and 12 report a positive significance effect of bilingualism in reading skill of bilingual subjects in comparison with their monolingual counterparts. As stated by (Corder, 1979) since bilinguals have some opportunities that enable them to make comparison between two languages; this is a vacillator factor and an asset for them on learning a new language more fluently. Therefore, bilingual subjects generate the new language's structure and enjoy better reading skill than monolingual subjects.

In fact the results of the present study are in line with the previous studies which have shown the positive relationship between students' bilingualism, recognizing Spanish language cognates and English reading comprehension (Nagy and et.al, 1993), findings of (Kassaian & Esmae, 2011) that showed bilingualism is highly correlated with breadth of vocabulary knowledge and reading skill, and findings of (Hakuta and Diaz, 1985) the positive effect of bilingualism on intelligence and cognitive flexibility. These findings are in contrast with the findings of (Gelderren et al., 2003) that claimed bilinguals were weaker in reading comprehension of L3 than monolinguals, and findings of (Karimi and Kabiri, 2011) that Iranian bilingual students got lower scores than monolingual in reading comprehension test.

This study has practical and theoretical implications in language teaching. The results showed that bilingualism has a positive effect on L3 reading skill. Therefore, this study provides a basis for improving the quality of practices in the teaching of first, second, and third languages’ reading skill. However, the number of the participants of the study was very limited and included just female students and this could affect the result. The study was done considering one grade of the students, as well, which may affect the results of the study. Further researchers can do this study with more students from different grades with male and female students. It would be better to have more bilingual groups or work on other skills such as speaking, listening, writing, and sub-skills.

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