

An Investigation of the Effect of Bilingualism on the Learning and Social Adaptation among First Graders in Ardabil Primary Schools

Zahra Soleimanzadeh¹, Nader Assadi Aidinlou², Masoud zoghi³

¹- Student of MA in General linguistics Ahar Baranch, Islamic Azad University, Ahar, Iran

²Phd in Applied Linguistics, Department of English Language, Ahar branch, Islamic Azad University, Ahar, Iran

³ Faculty member of Islamic Azad University, Ahar branch, Islamic Azad University, Ahar, Iran

ABSTRACT

How to learn a second language in general and the proper age to learn it, in particular, is a prominent issue in linguistics. Nowadays, teaching bilingual children is of high importance for most families. However, bilingualism does not happen overnight. In the study of bilingualism and multilingualism, different researchers have presented different ideas on its advantages and disadvantages. The purpose of this research is to study the effect of bilingualism on the learning and social adaptation among first graders of Ardabil primary schools in math and spelling compared with monolingual students in Tehran. The statistic sample of this research is thirty bilingual students all of whom are seven year old boys. These students were selected randomly from five schools compared with thirty monolingual students that were seven year old boys and were selected randomly from five schools, too. The approach used was quantity and quality. The data were collected through pre-test, post-test and questionnaire. Then data were analyzed by use of t- test and x2. The results of pre-test and post-test showed that bilingualism does not have any effect on the learning in math and spelling and the result of questionnaire showed that social adaptation among bilingual students (Turkish and Persian) is different from monolingual students (Persian).

KEY WORDS: bilingualism, bilingual, monolingual, school bilingualism, social adaptation, learning.

INTRODUCTION

Language, as a social phenomenon, has a major role in human life and bilingualism of some people has roots in social and cultural aspects. Those who have been brought up in bilingual families have become bilingual. Migration to a society with a new language can also cause bilingualism. Social, scientific and political reasons are some of the factors causing bilingualism. They show the amount of their mastery over the second language and also their endeavor to keep mastery over the first language. In some societies, bilingualism of children is a necessity rather than a choice. It is the parents who create for them a special environment [7].

Background

There have been some other researches on the relationship between bilingualism and academic improvement. The superiority of monolingual students in advancement test shows the fact those students face problems which rise from lack of understanding of the materials presented by the teachers. This may cause disappointment and a feeling of inferiority in the students. The readiness of learners is a highly effective factor in learning. Therefore, the primary school students, especially those of grade one, whose age and experience is low and have got different disharmonic languages, can not ask their questions from the teacher in case they do not understand anything in the class. In addition, if a child lives in an uneducated family who are unfamiliar with the formal language and give them help in no way, his/her problem will be doubled and he/she will either fail or leave school. However, if the family is educated and familiar with the formal language, he/she will not have the above problems and they will help him/her go to higher levels and master the formal language. It seems the villagers have more problems than the city-dwellers. Because the harmony of social environment and lack of contact with Farsi speakers and their use of mother tongue in and outside the class doubles their difficulty in understanding the lesson. Although the negative effects of bilingualism on intelligence and some other non- lingual features have been denied in many researches, one can say that its negative effects on learning and advancement are crystal clear. It also affects their intelligence and their emotional, social and moral state. In short, if a student can not learn the formal language in primary school, he/she will be a stranger in the society [8].

Hosseini [6] found that one of the factors causing the failure of students whose mother tongue is not Persian is that after six years of using mother tongue in and outside home, the child faces the unfamiliar Persian language at school. It is quite strange for him and he may not understand his lessons well and this will hinder his advancement in learning.

The research done by Sangbari [12] indicates that the one- month pre-school education has a positive effect on grade one students in bilingual regions. It familiarizes the students with school and reduces local dialect through education .

Nooriye and et al. [11] believe the factors causing bilingual students' failure are: 1.The unfamiliarity of students with Persian and their difficulty in understanding. 2. Low level of the family's culture and education. 3. Unavailability of radio and television for villagers. 4. Weak stance of Persian language and lack of attention to literature in cities and villages. 5. Not attending the necessary pre-school classes. Of the various factors causing failure in education are the language inabilities and bilingualism. The role of the first language and learning the second one is obvious for educational specialists. There are lots of different researches in this field. Ausubal [3] believes bilingual students do better than common people at school.

Bernstein [5] believes bilingual students not only have difficulty in state of subjects and concepts, language skills, spelling and composition but also generally have difficulty in presentation of advanced mental meditation.

The research done by Adib [1] about bilingual students in Khoram Abad and monolingual students in Burujerd showed that there is not any meaningful difference among them in spelling scores. Nilipur [10] in his book says, about math, Macnarma (1966) studied Irish students whose family language was English and school language was Irish. Then he understood that these students in math are slower than normal students. The research done by Badghan [4] in Horand regions of Tabriz showed that there is not any meaningful difference among students who learned math in Persian and students who learned math in Persian and Turkish. The research done by Adib [1] also showed that there is not any meaningful difference among math scores of Burujerd monolingual students and Khoram Abad bilingual students. Akbarzadeh [2] in her research stated that there is direct connection among social adaptation and educational progress.

Statement of the problem

Bilingualism or multilingualism means to have and to use two or many different languages in such a way one can use any language he needs for communication. Bilingualism occurs both naturally and through instruction in the society. In natural bilingualism, one lives in one family and in one society and faces two languages without any formal instruction. He is finally able to use both languages communicatively. In instructive bilingualism, formal instruction makes some people familiar with another language [9]. Bilingualism in Iran is mostly of the instructive kind in which Persian language has an instructive and cultural role. After learning mother tongue, the child encounters Persian language for educational and cultural reasons and thus he becomes bilingual. That is, bilingualism occurs through formal education. It is a need to provide these bilingual children who learn Persian at school with suitable education. Otherwise, bilingualism can not act as a useful lingual experience in their cognitive and mental development. It may have negative effects on their education [10].

Questions of research are:

1. Do the students who are taught both in Persian and Turkish act differently in spelling compared to those taught just in Persian?
2. Do the students who are taught in Persian and Turkish act differently in math compared to those taught just in Persian?
3. Is the social adaptation of students taught in both Persian and Turkish different from those taught just in Persian?

Purposes of research are:

1. The study of the effect of bilingualism on the learning of bilingual grade one students in Ardabil primary schools in spelling compared with monolingual students in Tehran.
2. The study of the effect of bilingualism on the learning of bilingual grade one students in Ardabil primary schools in math compared with monolingual students in Tehran.
3. To investigate amount of social adaptation in bilingual grade one students in Ardabil primary schools compared with monolingual students in Tehran.
4. To present suggestions based on present research to educational professionals for the sake of more growth and development of abilities in bilingual students.

MATERIALS AND METHODS

The research method here is quantity and quality. There exist two groups: experimental and control group. The people chosen for the study were thirty bilingual grade one students in Ardabil primary school. They were chosen from five schools at random. They were compared with thirty monolingual grade one students of Tehran, who were also chosen at random. All of these students in both groups were seven year old boys. The tools necessary to gather data are: pre-test, post-test and questionnaire. First, a pre-test was given to the experimental group and after teaching both Persian and Turkish to this group for two months, a post-test was given to them. The researcher also used a special questionnaire for teachers to measure the social adaptation of the experimental group at school. These stages were also taken for the test group and the results were analyzed. The

data was analyzed through descriptive statistical approaches and by the use of SPSS software. Descriptive statistical techniques such as frequency distribution, percentile scores and some graphs were used to analyze the data. T-test and k- test were also used.

RESULTS

This study has presented important findings. In response to first and second questions of research, a test as a pre-test has been done with thirty students. All of whom are seven year old boys. After two months that were considered, the researcher tested them again with a test as a post-test. Of course, similar tests were given to control group. After calculating the scores of all students, score average was obtained for both groups and the observed difference between two groups (experimental group and control group) was calculated by using t-test.

Table (1) the results of t-test with experimental group and control group in pre-test spelling

group	number of sample	average	average deviation	average difference	t-test	degree of freedom	significance level
control	30	19.53	0.47	0.02	- 0.21	58	0.83
experimental	30	19.55	0.43				

As seen in this table, the significant level of error test for 0.95 safety level was more than 0.05 ($p=0.83$). So we said that there was not any meaningful difference among pre-test spelling scores of control group students and experimental group students.

Table (2) the results of t-test with experimental group and control group in post-test spelling

group	number of sample	average	average deviation	average difference	t-test	degree of freedom	significance level
control	30	19.59	0.45	0.13	1.07	58	0.28
experimental	30	19.46	0.44				

As seen in this table, the significant level of error test for 0.95 safety level was more than 0.05 ($p=0.28$). So we said that there was not any meaningful difference among post-test spelling scores of control group students and experimental group students.

Table (3) the results of t-test with experimental group and control group in pre-test math

group	number of sample	average	average deviation	average difference	t-test	degree of freedom	significance level
control	30	19.54	0.48	0.01	0.06	58	0.94
experimental	30	19.53	0.46				

As seen in this table, the significant level of error test for 0.95 safety level was more than 0.05 ($p=0.94$). So we said that there was not any meaningful difference among pre-test math scores of control group students and experimental group students.

Table (4) the results of t-test with experimental group and control group in post-test math

group	number of sample	average	average deviation	average difference	t-test	degree of freedom	significance level
control	30	19.56	0.44	0.02	-0.14	58	0.88
experimental	30	19.58	0.43				

As seen in this table, the significant level of error test for 0.95 safety level was more than 0.05 ($p=0.88$). So we said that there was not any meaningful difference among post-test math scores of control group students and experimental group students.

To answer the third question we used questionnaire for teachers. This questionnaire included twenty-two questions and was classified in eight variables that consist of: participation in group activities, communication with others, acceptance of responsibility, cooperation with others, making friend, satisfaction of school, desire to learn and to follow school rules. In this questionnaire we considered six questions for participation in group activities, four questions for communication with others, two questions for acceptance of responsibility, two questions for cooperation with others, two questions for making friend, two questions for satisfaction of school, two questions for desire to learn and two questions for following school rules.

Table (5) situation distributing among control group and experimental group in the light of participation in group activities

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	152	84.4	18	10	10	5.6	5.99	2	30.4
control	180	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was meaningful difference among control group and experimental group in the light of participation in group activities.

Table (6) situation distributing among control group and experimental group in the light of communication with others

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	93	77.5	17	14.2	10	8.3	5.99	2	27.4
control	119	99.2	1	0.8	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was meaningful difference among control group and experimental group in the light of communication with others.

Table (7) situation distributing among control group and experimental group in the light of acceptance of responsibility

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	49	81.7	7	11.7	4	6.6	5.99	2	12.2
control	60	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was meaningful difference among control group and experimental group in the light of acceptance of responsibility.

Table (8) situation distributing among control group and experimental group in the light of cooperation with others

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	50	83.4	5	8.3	5	8.3	5.99	2	10.8
control	60	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was meaningful difference among control group and experimental group in the light of cooperation with others.

Table (9) situation distributing among control group and experimental group in the light of making friend

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	45	75	11	18.3	4	6.7	5.99	2	17.2
control	60	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was meaningful difference among control group and experimental group in the light of making friend.

Table (10) situation distributing among control group and experimental group in the light of satisfaction of school environment

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	55	91.7	2	3.3	3	5	5.99	2	5.2
control	60	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $p= 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was not any meaningful difference among control group and experimental group in the light of satisfaction of school environment.

Table (11) situation distributing among control group and experimental group in the light of desire to learn

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	57	95	2	3.3	1	1.7	5.99	2	3.06
control	60	100	-	-	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $\rho = 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was not any meaningful difference among control group and experimental group in the light of desire to learn.

Table (12) situation distributing among control group and experimental group in the light of following school rules

	fine		average		poor		significance level	degree of freedom	k square
	abundance	percent	abundance	percent	abundance	percent			
experimental	55	91.7	2	3.3	3	5	5.99	2	3.6
control	59	98.3	1	1.7	-	-			

With due attention to the k square of this work for 0.95 safety level was more than $\rho = 5.99$, so the same distribution rejected with 0.95 safety level. In other words, there was not any meaningful difference among control group and experimental group in the light of following school rules.

DISCUSSIONS

According to the obtained findings of pre-test and post-test we can say, there is not any difference among the performance of students who learn two languages (Turkish and Persian) and the performance of students who receive training in one language (Persian) at spelling and math. According to the obtained findings of questionnaire we can say that in three cases: satisfaction of school environment, desire to learn and to follow school rules, there is not any meaningful difference among control group and experimental group. But other cases: making friend, cooperation with others, acceptance of responsibility, communication with others and participation in group activities, there is meaningful difference among control group and experimental group. So we can say: social adaptation is different among bilingual students (Persian and Turkish) than monolingual students (Persian). According to Bernstein's view [5] bilingual students not only have difficulty in state of subjects and concepts, language skills, spelling and composition but also generally have difficulty in presentation of advanced mental meditation. But the research done by Adib [1] about bilingual students in Khoram Abad and monolingual students in Burujerd showed that there is not any meaningful difference among them in spelling scores. Nilipur [10] in his book says, about math, Macnarma (1966) studied Irish students whose family language was English and school language was Irish. Then he understood that these students in math are slower than normal students. The research done by Badghan [4] in Horand regions of Tabriz showed that there is not any meaningful difference among students who learned math in Persian and students who learned math in Persian and Turkish. The research done by Adib [1] also showed that there is not any meaningful difference among math scores of Burujerd monolingual students and Khoram Abad bilingual students. Akbarzadeh [2] in her research stated that there is direct connection among social adaptation and educational progress.

REFERENCES

1. Adib, Y., 1372. To Compare the Effect of Pre-school on Educational Performance of Bilingual Grade One Students and Monolingual Grade One Students (Tehran-Tabriz), Tabriz, Psychology Univ.
2. Akbarzadeh, N., 1389. To study of Social, Educational, Emotional Adaptation of Grade One students, Teacher's growth Article.
3. Ausubal, D.P., 1964. The Psychology of Meaningful Verbal Learning. New York, Grun and Stratton.
4. Badghan, S., 1390. To Study the Effect of Bilingual and Monolingual Training of Math between Fifth Grade Students of Horand, Azad Univ, Ahar Branch.
5. Bernstien, B., 1972. Language and Social Context. London, Penguin.
6. Hosseini, M.G., 1371. To Study the Factors Causing the Failure of Students. Tabriz, Tabriz Edecation.
7. Hudson, G., Translator: Bahrami, A., 1378. Necessary Discuses of Preliminary linguistics. Tehran, Rahnama.
8. Mehrjoo, A., and Haryan, M., 1371. To Compare Educational Progress in Bilingual and Monolingual. Tabriz, Tabriz Education.
9. Nersisians, A., 1382. Discourses on Bilingualism of Social Science's Point of View. Tehran, Publication of Anthropology Search Center.
10. Nilipur, R., 1380. Linguistics and Language Pathology. Tehran, Publication of Harmas.
11. Nooriye, M.R., and Ghol Mohamadi, M., and Bahrami, B., 1371. Bilingualism Dimensions in Hameden City, M. A. thesis, Tabriz Univ.
12. Sangbari, B., 1373. To Study the One- month Pre-school Education on Educational Progress of Grade One Students in Sistan and Baluchestan, M. A. thesis, Tabriz Univ.