



READING COMPREHENSION SKILLS OF BILINGUAL CHILDREN IN TURKEY

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Abstract:

This study aims to compare the reading comprehension skills of the bilingual students studying at the 4th Grade of the Primary School with the monolingual students studying at the 4th Grade. With this purpose, 303 students were included from the Black Sea Region, where mainly monolingual students studied and 247 students were included from the Eastern and South-eastern Regions, where bilingual students studied. Furthermore, in order to expand the scope of the research, it was intended to find out the views of class teachers about the reading comprehension skills of bilingual students. So in the research, the mixed method and the parallel pattern converging from the patterns of the mixed method were used. The research result presented a significant difference between the reading comprehension skills of the monolingual 4th grade students from the Black Sea Region and the students from the Eastern and South-eastern Regions. This difference was in favour of the monolingual students. On the other hand, reading comprehension skills of the 4th graders in the Eastern and South-eastern Regions did not significantly differ within itself depending on bilingualism.

Keywords: bilingual children, native language, reading comprehension, Turkish, Kurdish, Arabic

1. Introduction

The official language and medium of instruction is Turkish in Turkey. According to Article 42 of the Constitution of the Republic of Turkey, *“No language other than Turkish shall be taught as a mother tongue to Turkish citizens at any institutions of training or education. Foreign languages to be taught in institutions of training and education, and the*

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rules to be followed by schools conducting training and education in a foreign language, shall be determined by law. The provisions of international treaties are reserved". Turkey consists of seven geographical regions: Mediterranean Region, Black Sea Region, Marmara Region, Central Anatolia Region, Eastern Anatolia Region, Southeastern Anatolia Region and Aegean Region. Turkey has ethnic groups speaking Arabic, Kurdish and Zazaki especially in Eastern and Southeastern Regions. Although figures based on official research cannot be reached, while Turkish is not spoken at all in some families, it is a known fact that some families speak Turkish in addition to their mother tongue of Kurdish, Arabic, and Zazaki. Furthermore, as identified by Smits and Gündüz-Hoşgör (2003), considering many Kurdish women did not receive primary education in which the language of instruction is Turkish, most of these women probably did not learn Turkish at all. In this case, while some children, especially those living in rural areas, start school without knowing Turkish, others start school with an insufficient level of Turkish. Pre-school education is not compulsory in Turkey. For this reason, bilingual children or children who do not know Turkish do not enroll in literacy programmes/are not taught literacy. Within this process, children are expected to both learn Turkish and develop literacy and other subjects such as Life Science and Mathematics. According to Janssen, Bosman and Leseman (2013), while the first language is usually used for interpersonal communication informally, the second language is mostly the language of school and public media. However, even if a bilingual person has been exposed to both languages since their childhood, they are not expected to acquire two languages equally because acquiring a language is based on the quality and quantity of the input. In this case, it can be considered a disadvantage for bilingual children living in this region that they are subject to the same program as their monolingual peers. The reason for this disadvantage can be interpreted simply as Rolstad (2015) states: While monolingual students try mastering academic content in school, bilingual students face two challenges: to master content and a new language in school.

According to PISA Turkey report (2012), the average of the eastern regions where bilingual children are located is usually lower when regional averages are examined (Ministry of Education, 2013). Although there is no scientific evidence showing that the reason for this failure is bilingualism, bilingualism may be one of the reasons. In the literature, it is possible to find studies of bilingual children or children educated through a second language comparing academic achievement or language competences of these children to their monolingual peers (Alanis, 2010; Cummins, 1982; Jong, 2002; Han, 2012; Miller et al., 2006; Verhoeven, Steenge & Balkom, 2012). In these studies, it is emphasized that bilingualism and children who are educated through a second language are in a more disadvantageous situation compared to their monolingual peers. It is quite natural that there is a difference between the bilingual children and the

monolingual children in terms of language acquisition (Barac & Biyolsk, 2012) and it takes longer for them to gain a proficient level of academic performance in the second language (Collier, 1995). Bilingual students use their time for acquisition of the skills in both languages, and most probably, certain words they use in one language do not appear in the context of the other language (Bialystok et. al., 2010).

However, there are scientists who point out that bilingualism is not always a disadvantage; in contrast, it may even be an advantage in some cases. In the last 35 years, we have observed over 150 studies which back up Goethe's remark: *"If you know a single language, the fact is that you do not know it well, indeed."* It is claimed in the research that thinking skills of bilingual students become more flexible as they handle the information they receive in both languages (Cummins, 2001). For instance, Arefi and Alizadeh (2008) note that bilingual children who speak Kurdish and Azerbaijani perform better than children who speak only Persian in their study of the effects of bilingualism on cognitive development.

2. Reading comprehension and bilingualism

Reading comprehension is a dynamic and interactive process. To comprehend a written text, readers need to be familiar with each word, to know the meaning of each word and to get the whole meaning of the text by discovering the meaning of all sentences separately and in relation to each other (Cain, 2005). While children try to "learn how to read" in the early years of school, they start "to read to learn" in the fourth grade (Keenan et al., 2006). In order to learn through reading, reading comprehension skill must develop.

Reading comprehension skill is a key factor that affects the academic success of students significantly. It can be regarded as a cognitive input behavior for all courses. It is unlikely to expect a student who is unable to comprehend what he/she reads to be successful in other school subjects as well as the Turkish language course. It can be said that reading comprehension skill may be affected by several factors such as correct reading, fluent reading, word repertoire, and motivation. One of these factors may be bilingualism, as well.

In a study carried out by Proctor et al. (2005), the results showed that the success of reading comprehension of Spanish-speaking students is related to English word repertoire, word-level reading skills, and listening comprehension skill. In another study performed by O'Donnell et al. (2003), the results demonstrated that immigrant students improved their skills of correct reading and reading comprehension after practice of pre-reading and discussion on keywords. Therefore, it can be said that

children who are educated through a second language need different teaching methods and techniques and more support when compared to their monolingual peers.

Collier (1995) argues that the development of native language should be completed for academic success in a second language. However, in Turkey as bilingual children do not have the chance to read and write in their native language, it is difficult to say anything about native language development. When they start school, generally, they learn to read and write in Turkish which they do not use in daily life and at the same time begin to learn the other lessons through Turkish. As there is no bilingual education program in Turkey, they are subject to the same educational program as their monolingual peers and must compete with their monolingual peers in countrywide central examinations.

Research on bilingual children in Turkey (Koşan, 2015; Gözüküçük, 2015; Rezzagil, 2010; Sarı, 2002; Tulu, 2009; Yaman, 2005) is rather limited. Therefore, an investigation of the reading comprehension skills of 4th graders in terms of bilingualism is assumed to contribute to the field. In light of this idea, this study attempted to find answers to the following questions:

1. Does the level of reading comprehension skills of the students studying at 4th grade of primary school show a significant difference depending on the region they are living in?
2. Does the level of reading comprehension skills of the students studying at 4th grade of primary school show a significant difference depending on bilingualism?
3. Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on bilingualism?
4. Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on their knowledge of Turkish at pre-school stage?
5. Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on the language spoken in their family context?
6. Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on the language they prefer outside the school?
7. What are the views of the class teachers about the reading comprehension skills of bilingual students?

3. Method

This research primarily aims to compare the reading comprehension skills of bilingual students and monolingual students. As a secondary aim in order to expand the size and scope of the research, the present study aims to identify the views of class teachers about the reading comprehension skills of bilingual students. For this purpose, a mixed-methods design was used in this study. As the quantitative data were used in order to determine the level of the reading comprehension skills of students, qualitative data were used to determine the views of class teachers. The converging parallel pattern – one of the mixed-methods designs -was used in the research.

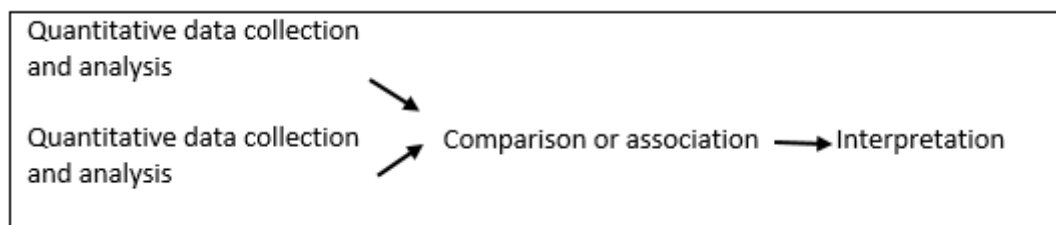


Figure 2: The prototype model of the converging parallel pattern
(Creswell & Plano Clark, 2014:177)

In the converging parallel pattern, the qualitative and quantitative stages of the research are conducted simultaneously. The stages are given equal focus in this pattern. The stages are handled separately during the data analysis and then the results are combined when making a general interpretation. In this pattern, the aim is to compare and synthesize quantitative data results and qualitative data findings in a complementary way in order to ensure perfect understanding of a phenomenon (Creswell & Plano Clark, 2014).

This research can be defined as an intrinsic case study in qualitative terms. In an intrinsic case study, the purpose of the research is to understand a specific situation. In this kind of study, the researcher describes the characteristics of a situation in detail in order to illuminate it (Johnson & Christensen, 2014). In this research, the aim was to describe the views of the class teachers about the reading comprehension skills of the bilingual students in detail.

In quantitative terms, a simple case study can be defined as a causal-comparative research. In simple case causal-comparative research, the researcher tests the correlation between a categorical independent variable and a quantitative independent variable and whether this correlation is statistically significant or not (Johnson & Christensen, 2014). In this research, the reading comprehension skill (the independent variable) was investigated depending on bilingualism (categorical variable) of the students.

3.1 Participants

Selection of a mixed sampling design consists of two criteria: time orientation (concurrently and sequentially) and sample relationship (identical, parallel, nested and multilevel) (Johnson & Christensen, 2014). As the qualitative and quantitative data were collected from different levels of the population (teachers and students) concurrently, this present study is based on the multilevel concurrent mixed sampling design.

The study was conducted with a total of 550 students studying in the primary fourth grade in the 2015-2016 academic year and 18 class teachers working in the Eastern and South-eastern Regions. The students were chosen from the province of Ordu in the Black Sea Region where monolingual students reside, from the provinces of Ağrı and Bingöl in the Eastern Region and the provinces of Şırnak and Mardin in the South-eastern Region where bilingual students reside.

The study employs the method of easy accessibility for sample selection.

3.2 Data Collection

In the present study, a reading comprehension achievement test was conducted in order to assess reading comprehension skills of students studying in fourth grade of primary school and quantitative data were obtained. In this assessment process, the achievement test developed by Bayat (2016) was used. The test consists of 30 items. The items in the test were prepared by examining the reading comprehension objectives for the 4th Grade Primary School in the Turkish Course Curriculum. Some of the objectives in the curriculum are to distinguish subjective or objective judgments in a reading text, to identify ambiguous statements in a text and to answer the questions of what, where, when, how, why, and who.

Below are two examples of the multiple-choice questions in the test:

Example 1: *Which of the following sentences is an expression that does not vary from person to person?*

- A. I think you should buy the thick one of these books.
- B. I especially like cherries among fruit.
- C. An orange contains Vitamin C.
- D. Carnation is a very beautiful flower.

Example 2:

“(I) Our country has a variety of climates. (II) Differences are observed in flora due to these different climates. (III) There are pine forests in Ankara. (IV) Differences in climate and flora make our country attractive in terms of tourism.”

Which of the sentences numbered above is not relevant to the topic of the paragraph?

A. I B. II C. III D. IV

While item difficulties of 30 questions in the test vary from .32 to .86; item discrimination values vary from .41 to .76 and the value of KR-20 which is calculated for internal consistency is .90. In this study, the value of KR-20 calculated for reliability was .89.

An interview form which includes open-ended questions was used in order to identify the views of class teachers related to reading comprehension skills of = bilingual students. In the preparation of the interview form, experts were consulted after determining the questions and necessary adjustments were made to the questions based on the ideas of the experts. The draft form was administered to groups that were outside the scope of the research in order to assess feasibility and to remove ambiguities. Thereby, the present interview form was formed. The data obtained from the interview form were analysed independently by two experts. According to the results of the analysis performed by these two experts, the percentage agreement to compare coding by two experts is .88. The percentage agreement should be higher than 70% in order to measure the interrater reliability and the intrarater reliability (Tavşancıl and Aslan, 2001: 81). Non-coherent codings were revised and recoded with a collective decision. As a result, it can be said that coding reliability was ensured at an acceptable level.

In the stage of data collection, the researcher set up a meeting with the school principals and the teachers in order to inform them about the purpose of the study and the implementation process of the assessment methods used in the study. The reading comprehension test was administered to the students in class hours under the observation of their teachers. After necessary instructions were given related to the application of the interview form, the form was given to the teachers to be collected at the end of a one-week period.

In case studies, forming a chain of evidence for the collected data (construct validity) is ensured by clearly showing how the results are obtained (internal validity) (Yıldırım and Şimşek, 2004).

In the present study, clearly presenting data collection instruments, how the data were gathered and how the data were analyzed may be considered to increase the validity of the study. Furthermore, presenting how the data collection instrument was developed step by step, the piloting study, and creating an interview form that may be utilized by other researchers may be regarded as an evidence of the reliability of the study.

3.3 Data Analysis

For analysis of quantitative data, standard deviation and arithmetic average were used. In the measurement of the effect size, the Cohen *d* and Cohen *f* statistical methods were used. The *d* and *f* values obtained at the end of the calculations are as follows .20- small effect size; .50- medium effect size; and .80-large effect size (Cohen, 1988; Akt, Özsoy & Özsoy, 2013). It has been pointed out, particularly in studies conducted in social sciences, that data show a normal distribution when the values of skewness and kurtosis variables are in the range of -2 to +2 (Garson, 2012:18). In this present study, as the values for kurtosis and skewness were found within the range of -2 and +2, it is considered that the data are normally distributed. As statistical methods, the parametric *t* test was used for independent groups and the one-way analysis of variance (ANOVA) was used for the independent groups.

Descriptive analysis method was used for qualitative data analysis. The stages and theoretical explanations of the descriptive analysis are as follows:

- a. Forming a framework for the descriptive analysis:* The data were organized based on the themes obtained from the interview questions.
- b. Processing data depending on the thematic framework:* The data obtained through the interview were processed based on the framework formed.
- c. Defining the findings:* The data processed based on the thematic framework were presented in tables with statistical data (frequency). The views of the teachers were also presented in quotation marks and the teacher's code was given in parentheses at the end of the quotation, as in the following example: "... (T1) Teacher 1 stated this.

4. Results

1st Sub-problem

Does the level of reading comprehension skills of the students studying in the 4th grade of primary school show a significant difference depending on the region they live in? The data findings regarding the first sub problem are presented in Table 1.

Table 1: The results of the *t* test regarding reading comprehension skills of students depending on the region they live in

Regions	n	\bar{X}	S	sd	t	P
East and Southeast Regions	303	11.23	5.32			
Black Sea Region	247	21.13	5.51	548	21.37	.000

p<0.05

The p-value obtained at the end of the *t* test is “.000”. As the p-value is less than 0.05, the difference between two groups is statistically significant in terms of reading comprehension skills. When the achievement scores for reading comprehension are examined, it is clearly seen in Table 1 that while the mean value (\bar{X}) for students in the Eastern and South-eastern Regions is 11.23, the mean value for students in the Black Sea Region is 21.11. Regarding these results, it can be concluded that the region in which education takes place is a variable that creates a significant difference in the reading comprehension skills of the students. Furthermore, the effect size measured was found to be large (*Cohen's d* = 1.83).

2nd Sub-problem

Does the level of reading comprehension skills of students studying in the 4th grade of primary school show a significant difference depending on bilingualism?

The data findings regarding the second sub problem are presented in Table 2.

Table 2: ANOVA results related to reading comprehension success of students depending on bilingualism

No	Groups	n	\bar{X}	S	Source of variance	K square total	sd	F	P	Difference
1	Bilingual	240	11.48	6.62	Between groups	8968.200	2	120.452	.000	1-2
2	Only Turkish	273	19.74	5.24	Within group (MSE)	20363.254	547			2-3
3	Slightly bilingual	37	13.08	7.27	Total	29331.455	549			
	Total	550	15.69	7.31						

p<0.05

When Table 2 is investigated, it appears the variable of bilingualism caused a significant difference in the reading comprehension level of 4th grade students ($F(2- 547)=120.452$ $p<.05$). To determine the direction of this difference, the results of Tukey analysis determined a difference between those who only know Turkish and who are bilingual and again between those who only know Turkish and who slightly know a second language. It can be said that the reading comprehension success levels of bilingual students were lower compared to monolingual students. *Cohen's f* = .67 was at moderate levels.

3rd Sub-problem

Does the level of reading comprehension skills of the students living in the Eastern and Southeastern Regions show a significant difference depending on bilingualism? The results relating to the third sub-problem are presented in Table 3.

Table 3: ANOVA results relating to reading comprehension success of students living in Eastern and Southeastern Regions based on bilingualism

No	Groups	n	\bar{X}	S	Source of variance	K squares total	sd	F	P	Difference
1	Bilingual	233	11.32	5.17	Between groups	31.078	2	.550	.578	None
2	Only Turkish	74	11.33	6.07	Within group (MSE)	8482.545	300			
3	Slightly bilingual	56	10.21	5.38	Total	8513.624	302			
	Total		11.22			51.31				

p<0.05

One way analysis of variance (ANOVA) performed to investigate whether being bilingual caused a significant difference in reading comprehension skill levels of students living in Eastern and Southeastern Regions found the bilingual variable did not cause a significant difference (p>.05).

4th Sub-Problem

Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on their knowledge of Turkish at pre-school stage? The results relating to the fourth sub-problem are presented in Table 4.

Table 4: ANOVA results relating to reading comprehension success of students living in Eastern and Southeastern Regions based on pre-school knowledge of Turkish

No	Groups	n	\bar{X}	S	Source of variance	K squares total	sd	F	P	Difference
1	Bilingual	173	11.43	7.17	Between groups	18.762	2	.331	.718	none
2	Only Turkish	74	10.93	5.65	Within group (MSE)	8494.862	300			
3	Slightly bilingual	56	10.93	7.31	Total	8513.624	302			
	Total	303	11.22	5.31						

p<0.05

To investigate whether knowledge of Turkish at pre-school stage caused a difference in reading comprehension skill levels among students living in the Eastern and Southeastern Regions, results of one way analysis of variance (ANOVA) found knowing Turkish before school did not cause a significant difference ($p > .05$).

5th Sub-problem

Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on the language spoken in their family context? Results relating to the fifth sub-problem are presented in Table 5.

Table 5: ANOVA results relating to reading comprehension success of students living in Eastern and Southeastern Regions based on language spoken in the family

No	Groups	n	\bar{X}	S	Source of Variance	K squares total	sd	F	P	Difference
1	Only Arabic	41	11.51	5.19	Between groups	233.939	4	.215	.080	None
2	Only Turkish	45	11.48	6.19						
3	Only Kurdish	105	10.22	4.45	Total	8513.624	302			
4	Turkish and Arabic	39	12.97	5.87						
5	Turkish and Kurdish	73	11.38	5.44						
	Total	303	11.22	5.31						

$p < 0.05$

One way analysis of variance (ANOVA) performed to investigate whether the language spoken in the family caused a significant difference in reading comprehension skill levels of students living in Eastern and Southeastern Regions found the family language variable did not cause a significant difference ($p > .05$).

6th Sub-problem

Does the level of reading comprehension skills of the students living in the Eastern and South-eastern Regions show a significant difference depending on the language they prefer outside the school? The results relating to the sixth sub-problem are shown in Table 6.

Table 6: ANOVA results relating to reading comprehension success of students living in Eastern and Southeastern Regions based on language spoken outside of school

No	Groups	n	\bar{X}	S	Source of variance	K squares total	sd	F	P	Difference
1	Only Arabic	13	10.08	3.97	Between groups	230.501	4	2.073	.084	None
2	Only Turkish	90	12.34	5.85	Within group (MSE)	8283.123	298			
3	Only Kurdish	87	10.82	4.99	Total	8513.624	302			
4	Turkish and Arabic	39	11.76	5.46						
5	Turkish and Kurdish	74	10.22	4.92						
	Total	303	11.22	5.31						

p<0.05

To investigate whether language spoken in daily life by students (outside school) caused a difference in reading comprehension skill levels among students living in the Eastern and Southeastern Regions, results of one way analysis of variance (ANOVA) found language spoken outside school did not cause a significant difference ($p>.05$).

7th Sub-Problem

What are the views of the class teachers about the reading comprehension skills of bilingual students? The results relating to the seventh sub-problem are presented in the following tables.

Table 7: Opinions of class teachers on the effect of bilingualism on gaining reading comprehension skills

Opinions	f
Bilingual students have difficulty with reading comprehension	16
They don't know the meaning of many Turkish words	3
Their academic success falls because of difficulties with reading comprehension	3
They experience a disadvantage due to education in a different language	3
They do not want to read as they have difficulty with reading comprehension	2
They don't know idioms, proverbs and metaphors	2
They feel the need to know the equivalent of the Turkish word in their native language	2
They have difficulty with reading comprehension due to difference sentence structure (grammar) in their native language	2
Speaking their native language in daily life makes reading comprehension more difficult	2

All of the teachers participating in interviews (16) were of the opinion that bilingual students had difficulty with reading comprehension. Related to this T2 said *“Not just here where the native language of all students is Kurdish, ninety percent of students living in*

the east have Kurdish as their native language. In spite of this reality, there is no application to help students.” T3 stated “As children don’t know the equivalent of the Turkish words in their native language, it makes reading comprehension more difficult.

Table 8: Opinions of class teachers on the appropriateness of bilingual student levels in terms of reading comprehension achievements in the Turkish learning program

Opinions	f
Achievements are very difficult for bilingual students	8
Achievements were written without regard for the environment that bilingual students live in	3
Achievements were written without regard for bilingual students	2
Achievements are appropriate for bilingual students, however texts in lesson books are not appropriate	2

The opinions of participating teachers on the achievements in the Turkish learning program may be said to focus on the difficulty for bilingual students. T11 offered the following statement *“I don’t think achievements are appropriate. A child thinking in Kurdish, living in Kurdish and receiving education in Turkish is very confused.”*

Table 9: Opinions of class teachers on texts in Turkish lesson books for bilingual students

Opinions	f
Texts are above the level of bilingual students	7
The language in the texts is difficult	5
The texts contain many words that bilingual students do not comprehend	5
The texts are very long	2
The texts require more visual support	2

When the table is investigated, it can be said that teachers found the texts in lesson books to be very difficult for bilingual students. T6 stated *“Texts are longer than necessary, contain words children don’t use in daily life. Not only Turkish books, other lesson books are above the children’s level”.*

Table 10: Opinions of class teachers on recommendations to resolve difficulties experienced by bilingual students in achieving reading comprehension

Opinions	f
Lesson books should be arranged with regard to bilingual students	6
Children living in this environment should definitely attend pre-school education	4
A Turkish learning program should be arranged for bilingual students	3
Education should be given to the families of bilingual children	2
Students in this region should first have education in their native language	2
Teachers working in this region should know Kurdish/Arabic	2
Education should be reformed for bilingual students	1

When the table is investigated, it appears that recommendations focused on appropriate arrangement of Turkish lesson books for bilingual students. In addition to recommendations relating to re-organizing the current education curriculum such as making pre-school education mandatory and reorganizing the Turkish learning program were made most often. Other recommendations included providing education to families in the region, initial education in native language, teachers working in this region knowing Kurdish/Arabic and more deep-rooted reforms.

5. Discussion and Conclusion

The research investigated the reading comprehension skill levels of 4th grade students in the Black Sea (north) region with monolingual (native language Turkish) students and the Eastern and Southeastern regions with bilingual students. According to the results obtained from the research, the reading comprehension level of 4th grade students in the Black Sea Region was significantly different to students in the Eastern and Southeastern Regions. When the bilingual characteristics of students in the Black Sea, Eastern and Southeastern Regions are investigated, there was a significant difference in reading comprehension skills between bilingual students and monolingual students and between slightly bilingual students and monolingual students in favor of monolingual students. The research by Verhoeven, Steenge & Balkom (2012) also supports these results. In their research, they aimed to “*study 75 bilingual children (suffering from SLI – specific language impairment) from Turkey and Netherlands in terms of their proficiency in the first and second languages. Their ages changed from 7 to 11 and they were residing in the Netherlands.*” At the end of the research it was observed from the repeated measures design that children were more successful in L1 than L2 and as they grew older, they scored better both in L1 and L2. The results of regression analysis showed that proficiency of the children in L1 gave clues about their proficiency in L2. This could be checked by testing their nonverbal intelligence and short-term memory.

However, it was concluded that among students receiving education in the Eastern and Southeastern Regions the variable of bilingualism did not cause a significant difference in reading comprehension skills. Similarly, among students in the Eastern and Southeastern Regions knowing Turkish before school, language spoken in the family, and language chosen for daily life did not cause a significant difference in reading comprehension skills.

According to the 2012 PISA Turkey report, when reading points are investigated the mean for Turkey was 475, while in Southeast Anatolia it was 423, Northeast Anatolia was 459 and Eastern Black Sea was 478. Two different inferences may be made from these results. The first is that the region in Turkey has an effect on reading

comprehension skills; however, in Eastern and Southeastern regions being monolingual or bilingual do not have an effect. In the literature, it is possible to encounter studies concluding that in some situations bilingualism is not a disadvantage but an advantage. For example, Mortor and Harper (2007) suggested that the social and economic diversities observed between monolingual and bilingual children presented an advantage for bilinguals. Reviewing the literature on the difference in linguistic development between monolinguals and bilinguals can give ideas about the reasons for this in terms of print concepts, verbal language capability, capabilities affecting the meta-linguistic concepts. So it can be deduced that bilingualism affects the evolution of these three capabilities differently in different times. It can be advantageous (print concepts), disadvantageous (verbal language capability) or it can cause slight differences (meta-linguistic concepts) (Barac & Biyolsk, 2012).

The study by Dabrowska and Street (2005) on the difficulty interpreting passive sentences by highly educated (MA/PhD) groups of native and non-native speakers at Sheffield University studied four different groups: native graduates, native non-graduates, non-native graduates and non-native non-graduates. The study concluded that all groups obtained high success rates. One of the surprise results of the study was that the natives with lower education were good at rational sentences whereas they were not good at irrational active sentences (65% accurate) and were particularly bad at irrational active sentences (36% accurate). They suggested that handling of irrational non-fundamental sentences is based on meta-linguistic capabilities that can be encouraged by L2 training. This situation should be researched considering the factors lowering success in Eastern and Southeastern Regions did not include bilingualism. Many elements like socioeconomic level of families, attitudes toward education, and terror events in the region may affect success. A short time after the collection of data for this research, education was suspended in some provinces and counties in the Southeastern Region due to terror interventions. Under these conditions, it is clear that students in these cities have more serious problems than being monolingual or bilingual.

In the Eastern and Southeastern Region where bilingual students are in the majority (in this research 95.37% of students living in the Eastern and Southeastern Regions were bilingual), as bilingualism lowers the educational environment, it may be considered that the success of students who know Turkish (monolingual) may be lowered. According to the results obtained in the research, student choice of Turkish for daily life (29.9%) and Turkish speaking families (14.9%) had very low rates. Kesmez (2015) in research to determine the language use and primary language choices of bilingual academicians speaking Zazaish-Turkish at Bingöl University found that participants generally chose Zazaish to communicate with people around them, while

Turkish was generally used to communicate with more distant people. When these elements are noted, if bilingualism caused a statistical difference in reading comprehension skills of students in eastern regions, teachers in eastern regions organize their teaching according to the level of bilingual students and this situation may have affected the success of monolingual students with Turkish as their native language.

Alanis (2000) in research into a 50% bilingual education program in Texas found that the language success of students speaking Spanish with little English was sufficient for the 5th grade; however they concluded this success was reached only in the 4th grade. The success of 85% of Spanish speakers reached sufficient levels at the end of the 4th grade. In the Eastern and Southeastern Regions of Turkey where bilingual students are taught, considering that in a class the majority of students do not know any Turkish or insufficient Turkish when starting school, a difference in success by 4th grade compared with other regions where monolingual students are taught is unavoidable. In research by Thomas & Collier (2002), it was concluded that at the end of bilingual training lasting 4-7 years, bilingual students perform better than monolingual students in every school subject. The amount of short period courses are insufficient for low level English learners. Formal L1 instruction received by students determines the success in L2. As children speaking Kurdish-Turkish and Arabic-Turkish are migrants, the study on migrants by Leventhal, Xue, and Brooks-Gunn (2006) concluded “despite the fact that the average verbal scores of children raised as they grew older, non-immigrants performed better than immigrants (apart from Black Americans)”. Students in Eastern and Southeastern Regions do not have the chance to read and write in Kurdish or Arabic. Though there are television and radio channels broadcasting in Arabic and Kurdish in the country children living in these regions choose to speak Arabic or Kurdish with families in general so they encounter Turkish in the media or public spaces. This situation raises question marks about the sufficiency in their native language (Kurdish or Arabic).

If the native language is taught well at school, then the bilingual students become more successful and can also find the opportunity to become literate in the language. On the contrary, if the native language of the children is not encouraged, they do not progress in the language; thus, they can't form a sound individual or conceptual basis in the language (Commins, 2001).

The results obtained from quantitative data in the research may be considered to support the results obtained from teacher opinions. According to results from interviews with teachers on the difficulties encountered by bilingual students in gaining reading comprehension skills, the majority of teachers were of the opinion that bilingual students had difficulties with reading comprehension. According to teacher opinions, students encountered difficulties due to reasons such as weak vocabulary, not

understanding metaphors, idioms and proverbs, not speaking Turkish in daily life and different grammar structure in Turkish and their native languages. Additionally teachers thought that bilingual students were at a disadvantage and bilingualism negatively affected academic success. A study by Bialystock et al. (2010) is in parallel with the teacher opinions. Bialystock et al. (2010) administered the Peabody Picture Vocabulary Test to children from 3-10 years of age and concluded that bilingual children obtained lower points compared to monolingual children. The difference between the words was mainly observed among those related to the family context – this is expected, as English is not widely spoken in bilingual families compared to monolingual families.

Saban and Yiğit (2011) investigated the opinions of teachers working in schools in Şırnak where Turkish is not the native language of children about difficulties in teaching reading and writing. The difficulties encountered by students while learning reading-writing included not being able to express themselves, low vocabulary, learning taking more time, pronunciation problems, not knowing the use of tools-equipment, not comprehending reading, not answering questions asked and quickly forgetting what they learned. It may be said the results are in parallel with the results of this research.

Another result obtained from the interview findings is that teachers were of the opinion that the achievements listed in the Turkish learning program and texts in the lesson books were not at a level appropriate for bilingual students. Teachers suggested the following as recommendations for difficulties encountered by bilingual students in achieving reading comprehension skills; ensuring students living in these regions attend pre-school education, organizing the Turkish program with regard to bilingual students, simplifying the texts in lesson books, providing education for families of bilingual students, providing education in the native language first, and teachers employed in the region knowing Kurdish/Arabic languages.

According to the results of the research, to resolve difficulties encountered by bilingual students in Turkey a range of reforms are required. As in many countries in the world, a bilingual education program may be developed and applied. One of these is a two-way bilingual education program. A two-way bilingual education (TWBE) system includes a homogenous group of speakers of minority and majority languages. The aim is to educate the students in majority and minority languages in such a way that bilingualism is empowered (Jong, 2001).

However, to apply bilingual education programs, it will take a long time to place teachers, prepare the program and create the infrastructure. Additionally in these days when terrorism threatens life, it may be difficult to develop a bilingual education program due to political reasons. Providing the native language of an ethnic group with

official status means increasing the visibility of that group in a broad section of societal life from education to politics, and communication to sport (Terzioğlu 2007: 94). Together with different applications, it means parliamentary minutes, government decisions, lesson books, newspapers, signs, notices, menus etc. in both languages. It is necessary to search for the reasons for a society seeing itself as a national minority in a nation state insisting on education in their native language at this point. The demand for bilingual education is not just about learning a language it targets obtaining a status above education (Ersal, 2015). Of course, the independence and indivisible integrity of each state is above all else. In the modernization process in Turkey, these problems must be overcome. As a result, for education of bilingual students initially the following precautions may be taken:

- Pre-school education may be brought under the auspices of mandatory education
- Family education may be provided in Eastern and Southeastern Regions where bilingual students reside
- A separate education program may be prepared and applied with Turkish language level appropriate for bilingual students. In this way lesson books and other material may be organized for bilingual students.

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