MULTIPLE INTELLIGENCES ACTIVITIES AND READING COMPREHENSION DEVELOPMENT IN AN EFL CONTEXT

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ABSTRACT

The current study aims at exploring the effects of multiple intelligences activities versus traditional method on English reading comprehension development of the ninth grade students in Turkey. A quasi-experimental research method with a pre-test post-test design was applied. The participants were seventy ninth grade students at a state school in Turkey. Experimental group was instructed through multiple intelligences activities while the control group was instructed through traditional method. The findings suggest that the experimental group instructed through multiple intelligences activities showed more improvement from their pre-test to their post-test scores than the control group instructed through traditional method. Experimental group also outperformed the control group according to the post-test scores.

Keywords English as a foreign language, reading comprehension, multiple intelligences, and traditional method

INTRODUCTION

Although it is possible to suggest quite a number of methods and techniques to be able to achieve a successful foreign language instruction, it is a well-accepted fact that consideration of individual differences while planning lessons is vital for an effective instruction. Within this framework, Howard Gardner proposed Multiple Intelligences Theory (MIT) in 1983, claiming that each individual is unique and each individual possesses his/her her own learning processes. He claims that there are at least eight types of intelligences and individuals differ from each other in terms of their dominant intelligence(s). Therefore, in order to provide students with an effective instruction, teachers had better address different intelligence profiles of the students. There quite a number of studies related to the effectiveness of MI based instruction in second/foreign language teaching. However, the focus has been basically on grammar teaching and students' attitudes. The number of the studies trying to explore the effects of MI based instruction on skill development in English as a foreign language context in Turkey is limited. The quasi-experimental study presented here examines the effect of MI based instruction, particularly in terms of English reading comprehension development in Turkey. The research question this study sought to answer is: Are there any differences between two groups of participants instructed through traditional method versus multiple intelligences activities in terms of English reading comprehension development at the 9th grade level at a public school in Turkey?

Context

English is taught as a foreign language in Turkey; therefore language learners do not have much chance in practicing their foreign language in real-life situations. Ministry of National Education tries to encourage language learners to develop all four skill of language; however, in most cases language instrcution is limited to grammar instrcution and memorization of

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target vocabulary in order to be able to prepare students for certain exams. As a result, traditional method which often involves lecturing, structured and form-focused activities is applied in language classrooms (Baş, 2014). Traditional instruction often involves the presentation of the target form, controlled practice of the forms and production again in controlled settings. However, in order to have an effective foreign language teaching, research studies have put forward the fact that the individual differences have to be taken into consideration. Students can benefit more from the methods of instruction in which teachers use different methodologies, exercises and activities to reach all students, not just those who excel at linguistic and logical intelligence with a broader vision of education (Armstrong, 1999). Within this framework, the present study tries to compare traditional method and MI-based method considering the learner differences in terms of reading comprehension development in an EFL context.

REVİEW OF LİTERATURE

Multiple Intelligences Theory

Consideration of individual differences in language learning has drawn the attention of language teachers to Multiple Intelligences (MI) Theory as MI Theory emphasizes the idea that each and every individual is unique and has different tendencies while learning. According to Gardner (1983) intelligence is "the ability to solve problems or to create products that are valued within one or more cultural settings". He preferred to add an –s to intelligence as he broke from the tradition of IQ theory, which previously adhered to two fundamental principles: human cognition was unitary and individuals can adequately be described as having a single, quantifiable intelligence. According to Gardner this traditional view of intelligence was degrading intelligence to a simple faculty. Contrary to this reductionist view of intelligence, Gardner (1983, 1999) defined intelligence as: the skill to solve problems that a person might encounter in real life, the skill to procreate new problems to be solved, and the skill to produce something or suggest a service that is valued within one's culture. MI expands the scope of the concept of intelligence as it also include creative and practical abilities that are associated with each of eight intelligences (Baş, 2014). Gardner (1983, 2006) suggests that people vary in terms of eight types of intelligence; these are visual, verbal, mathematical, kinesthetic, interpersonal, intrapersonal, naturalistic, and musical intelligence:

Verbal-linguistic intelligence

It refers to the ability for language learning and using language appropriately (Armstrong, 1999; Berman, 2002; Campbell, Campbell, and Dickinson, 1999).

Logical-mathematical intelligence

Gardner (1993) described logical/mathematical intelligence as the ability to study problems, to carry out mathematical operations logically and analytically, and to conduct scientific investigations (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

Visual-spatial intelligence

It involves the sensitivity to color, line, shape, form, space, and the relationships that exist between these elements (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

Bodily-kinesthetic intelligence

This is the potential of using the body to express feelings or desires (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

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Musical intelligence

This intelligence involves a sensitivity to pitch, melody, rhythm, and tone and it also involves skill in performance and composition of musical patterns (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

Interpersonal intelligence

This intelligence refers to the ability to interact with people effectively and understanding them (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

Intrapersonal intelligence

This intelligence includes the awareness of one's own desires, fears, and abilities, and also using this information to make sound life decisions (Armstrong, 1999; Berman, 2002; Campbell et al., 1999).

Naturalist intelligence

It involves observing and understanding natural systems and being able to relate to nature.

Applying Multiple intelligences in foreign language teaching

Activities based on Multiple intelligences can provide language teachers with a framework in which they can prepare activities addressing different intelligence types of different learners. When learners are instructed through various techniques they can be expected to have chance to be able to understand the target material through their own ways of understanding and learning. Language learning seems to be directly related to verbal-linguistic intelligence; therefore, it is usually the case t hat techniques to teach a foreign language are limited to only this type of intelligence. As a result, only the students who are dominant in verbal—linguistic intelligence can be successful relatively. On the other hand, if students with different strengths in different domains are addressed in line with their dominant intelligence profiles, it can be expected they will become also successful language learners. In these regards, it is suggested by various research findings that implementation of activities based on MI has contributed to students' success positively in foreign language learning (Armstrong, 1999; Vural, 2005).

METHODOLOGY

The participants of the study were seventy nine-grade students at a public school in Turkey. Their level of English was A.1 according to CEFR *(*Common European Framework of Reference *for Languages).*

The present study is a quasi-experimental one with a pre-test & post-test design. Therefore, an experimental group and a control group were formed randomly between the two intact groups of participants. At the beginning of the study, both groups were given a pre-test on their reading comprehension. The pre-test results showed that both groups were equal in terms of reading comprehension levels in English. Then experimental group was instructed through MI-based activities while the control group was instructed through traditional method for four weeks. After the implementation process, both groups were given a post-test on their reading comprehension. Then, statistical analyses on students' scores were conducted to arrive at implications related to both methods.

RESULTS

In order to find out whether there were any differences between pre-test and post-test scores within the same group, paired samples t test was applied on scores for two groups separately.

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In addition, in order to find out whether there were any differences between the post test scores of experimental and control groups, independent samples t test was applied on the post-test scores of both groups.

Table 1 presents the findings about students' reading comprehension development:

Table 1. T-test Results for Experimental and Control Groups in Reading Comprehension Pre-test

Group	N	X	sd	df	t	Sig
Experimental	35	53.11	14.42	68	.176	.861
Control	35	53.69	12.71			

*p<.05

The data in Table 1 present that experimental group's mean score was 53.11 and control group's mean score was 53.69. In order to find out whether there was a statistically significant difference between two groups in terms of their English reading comprehension level at the beginning of the research study, an independent samples t-test was applied on their pre-test mean scores. T-test results showed that there was not a significant difference between mean scores of experimental and control groups in reading comprehension pre-test (t=.176, df=68; p>.05). Therefore, it could be concluded that both groups were similar in terms of their English reading comprehension level at the beginning of the research study.

In order to see the effects of MI-based activities and the traditional method within the groups, first paired samples t-test analyses were conducted on reading comprehension pre- and post-test means for both groups separately. These analyses were expected to provide insights about the effects of these two instructional methods on development of reading comprehension from pre-test to post-test. Table 2 presents the results:

Table 2. Paired t-test Results for Experimental and Control Groups on Pre- and Post-Reading Comprehension Tests

Group		N	X	sd	df	t	Sig
Exp.	Pre test	35	53.11	14.42	34	-9.360	.000
	Post test	35	64.69	11.85			
Control	Pre test	35	53.97	11.30	34	.478	.636
	Post test	35	53.74	11.21			

*p<.05

When the Table 2 is investigated it is seen that the experimental group's mean was 53.11 in pre-test and it was 64.69 in posttest. There is a significant difference from pre-test to post test for the experimental group in reading comprehension test (t= -9.360, df=34; p<.05). On the other hand, mean score for the control group was 53.97 in pre-test and 53.74 in post-test. T-test results suggest that there was not a significant difference from pre-test to post-test for the control group in reading comprehension development (t= .478, df=34; p>.05). These results can suggest that MI-based method had positive effects on increasing students' mean scores from pre-test to post-test within the groups while the traditional method did not have any significant effects on reading comprehension development.

In order to make a between-group comparison, conducting independent t-test on mean scores of both groups was necessary. For that end, after the experimental group was instructed

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through multiple intelligences activities in a content based context and the control group instructed through traditional method, both groups were given a reading comprehension post-test. As the study aimed at finding out whether there were any differences between the experimental group and the control group in terms of reading comprehension development, an independent samples t-test on mean scores attained from the reading comprehension post-test was applied. Table 3 presents the results on post-test scores for both groups.

Table 3. T-test Results for Experimental and Control Groups in Reading Comprehension Post-test

Group	N	X	sd	df	t	Sig
Experimental	35	64.69	11.85	68	3.76	.000
Control	35	53.46	13.07			

*p<.05

The data in 3 suggest that mean score of experimental group in reading comprehension post-test increased to be 64.69 though it was 53.11 in pre-test while the post test mean of control group became 53.46 although it was 53.69 in pre-test. The results present that there is a significant difference between reading comprehension post-test scores of the control group and those of the experimental group ($t=3.76$, $df=68$; $p<.05$). Although the development of reading comprehension requires a longer time period, the fact that the texts on the tests were in parallel with the subject matter covered during the application of two different instructional methods can draw a framework for interpreting the effects of these methods on reading comprehension. Results from the statistical analyses can suggest that using MI based activities can help students to develop students' reading comprehension skills more than the traditional way of instruction. These results may also be attributed to the contribution of MI based method to students' knowledge of grammar and vocabulary.

CONCLUSION

The results of the study suggest that the experimental group instructed through multiple intelligences activities showed more improvement from their pre-test to their post-test scores than the control group instructed through traditional method.

In traditional way of instruction, teachers prefer presenting subject matters to the students directly and mostly by using linguistic or mathematical methods and students are expected to act as passive receivers of knowledge no matter how different types of intelligences they have (Lawrence, 1998, Stanford, 2003); students were characterized as clever or not clever based on their understanding the material presented through only linguistic and mathematical ways (Berman, 2002; Gregory & Chapman, 2002). However, MI theory implies that all students are actually clever; they are only different from each other and have different types of intelligences and as the areas in which they are strong vary, teachers need to incorporate different instructional strategies in their lessons (Bailey, 1999; Hoerr, 2000; Nolen, 2003). MI based instructional modals suggest making use of diverse activities addressing all types of different intelligences so that students can find opportunities in order to explore their full range of intellectual capacities and achieve success (Berman, 2002; Hickey, 2004; Mbuva, 2003).

Instead of labeling students as being good at (or not good at) science, math or language, and demoralizing them, MI theory suggests that if students are instructed through their 'own' ways of learning and if they are provided with a rich environment in which they can explore their strengths, students can succeed and they may become more motivated for life-long learning (Gardner, 2006). Trying to teach each subject through same ways to each individual

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is often a waste of time and effort as each individual is unique and has his/her unique learning patterns; therefore, instruction should be personalized and each individual should be given chance to find something addressing his/her tendencies (Hoerr, 2000; Stanford, 2003). This can be achieved through preparing a rich environment in which students have opportunities to make use of their strengths and through varying teaching methods and enabling them to work in an enjoyable atmosphere (Christison, 2005; Lightbown & Spada, 2006).

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