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Investigation of multi-intelligence theory research by systematic review method[1]

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Abstract

The aim of this study is to determine the direction of research on the theory of multiple intelligences in the last 15 years and to introduce the developments in the theory of multiple intelligences based on the results. In the study, 30 articles on the theory of multiple intelligences in Turkey between the years 2006-2021 were examined. Researches; The publication year, the journal in which it was published, the course conducted, the purpose, the method/pattern, the sample, the data collection tools, the data analysis method, the results and the suggestions were examined in accordance with the themes. In the examinations, the researches on the theory of multiple intelligences are generally carried out in numerical courses, the researches are mostly conducted for teaching purposes, the students at the secondary school level are mostly included in the researches, the academic achievement test and multiple intelligence inventory are used as data collection tools, the t-test is used extensively as a data analysis method, showed that positive results were obtained in the vast majority of studies and all kinds of suggestions were presented. Based on these results, suggestions were made such as the need to include more qualitative research, conducting new studies in oral courses, and expanding the literature by conducting new research.

Keywords: multiple intelligence, systematic review, approach

Çoklu zekâ kuramı konulu araştırmaların sistematik derleme yöntemiyle incelenmesi

Özet

Bu çalışmanın amacı son 15 yıllık dönemde çoklu zekâ kuramı konusunda yürütülen araştırmaların yönünün belirlenmesi ve ortaya çıkan sonuçlara dayanarak çoklu zekâ kuramı konusundaki gelişmelerin tanıtılmasını sağlamaktır. Çalışmada 2006-2021 yılları arasında Türkiye'de çoklu zekâ kuramı konulu 30 makale incelemeye alınmıştır. Araştırmalar; yayın yılı, yayımlandığı dergi, yürütülen ders, amaç, yöntem/desen, örneklem, veri toplama araçları, veri analiz yöntemi, sonuç ve öneri temalarına uygun olarak incelenmiştir. İncelemeler çoklu zekâ kuramı ile ilgili araştırmaların genellikle sayısal derslerde yürütüldüğünü, araştırmaların çoğunlukla öğretim amaçlı yapıldığını, araştırmalarda en fazla ortaokul düzeyindeki öğrencilere yer verildiğini, veri toplama aracı olarak akademik başarı testi ve çoklu zekâ envanteri kullanıldığını, veri analiz yöntemi olarak t-testine fazlasıyla başvurulduğunu, araştırmaların çok büyük bir kısmında olumlu sonuçlar alındığını ve her çeşit öneri sunulduğunu göstermiştir. Bu sonuçlara dayanılarak nitel araştırmalara daha fazla yer verilmesi gerektiği, sözel derslerde yeni çalışmalar yürütülmesi ve yeni araştırmalar yapılarak literatürün genişletilmesi gibi öneriler sunulmuştur.

Anahtar Kelimeler: çoklu zekâ, sistematik derleme, yaklaşım

Introduction

Education is an issue that needs to be seriously considered and studied in order to improve the present situation of both society and people and to plan their future (Bakır, 2021). In the century we live in, improving the quality of education stands out as an important issue. This issue is also discussed in our country, and the source of many problems is considered as poor quality in education (Ada and Kücükali, 2016).

In ancient times, it was believed that individuals lived with their innate intelligence throughout their lives and could not be developed. Today, it has been proven that every individual's intelligence can be developed regardless of their age and ability (Tarman, 1998). However, since each individual grows up in different societies and environments, the level of development of their intelligence is also different from each other. For this reason, subjecting each individual to the same intelligence tests and focusing on only one aspect of their intelligence will not provide healthy information.

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“The definition of the individuality of intelligence is included in Howard Gardner's ‘Multiple Intelligences (MI) Theory’" (Tuğrul and Duran, 2003). With this approach, it has been accepted that each individual's intelligence is unique. It has also been suggested that each individual has a dominant intelligence area. These intelligence areas, which were claimed to have 7 in the past and then 8, are as follows;

1. Linguistic
2. Logical/Mathematical
3. Spatial
4. Bodily/Kinesthetic
5. Musical
6. Interpersonal
7. Naturalist
8. Intrapersonal

People with these intelligence types have different characteristics. Every person has a dominant intelligence area. However, a person has each of these intelligence areas, even though these intelligence areas are in the background because they are intertwined with each other. The intelligence areas of the individual can be developed.

Gardner argued that intelligence areas are related to the different abilities of individuals. Logical and linguistic intelligence, ability and precision; bodily and rhythmic intelligence, skill; interpersonal and spatial intelligence, talent; intrapersonal intelligence is about understanding one's own feelings. Apart from this, it is said that one of the greatest opportunities given to individuals is education. When individuals are given the opportunity to learn through different experiences, it has been observed that their intelligence areas reach a higher level (Başaran, 2004). In other words, even if the individual has only one dominant intelligence area, all intelligence areas can be developed by presenting activities that address all intelligence areas. Tests such as "Multiple Intelligence Fields Observation Form for Students" and "Multiple Intelligence Field Profiles for Students" are used to determine intelligence fields, but it is not correct to use these tests as an intelligence test (Saban, 2002). By using these tests, the dominant and underdeveloped intelligence areas of the individual should be determined and training should be given to the individual in line with these results.

In this study, studies on the theory of multiple intelligences were examined by systematic review method.

In order to use this method, the literature should be examined in detail and a new article should be written after this review. It is not correct to create these studies without examining the literature in detail and gaining sufficient knowledge on both the method and the subject (Karaçam, 2013). Therefore, while conducting these studies, the right precautions regarding validity and reliability should be taken, and help should be sought from someone who has worked on this subject before. During the research, attention should be paid to analyze the information correctly.

Many different results have been encountered in studies on the theory of multiple intelligences. In related studies, the integration of the theory of multiple intelligences into the education system has been extensively mentioned. Considering all these results, it is hoped that a study will be beneficial in terms of determining what kind of research has been done on the theory of multiple intelligences in Turkey in the last 15 years and how the perspective on the theory of multiple intelligences has changed, and eliminating the deficiencies in this subject. In addition to these, in this study, researches on the theory of multiple intelligences have been tried to be examined with certain parameters by considering both in a general and a special context. Therefore, the aim of this study is to establish the starting points for future research by determining what kind of contribution the research on the theory of multiple intelligences in Turkey made to the developments in education between the years 2006-2021, what the results are and what kind of suggestions are offered in terms of the development of the field. For this purpose, answers were sought to the following questions:

1. What is the distribution of research on the theory of multiple intelligences by years and journals?
2. What is the distribution of studies on the theory of multiple intelligences according to the courses in which they are conducted?
3. How do the aims of research on the theory of multiple intelligences change?
4. In which themes were the preferred method and pattern, sample, data collection tools, data analysis methods collected in research on multiple intelligences theory?
5. What is the distribution of research on the theory of multiple intelligences according to the results found?
6. What is the distribution of suggestions presented in research on multiple intelligences theory?

Method

In this study, a systematic review approach was adopted to make a detailed review of the studies conducted on multiple intelligences.
This method is the process of scanning the literature on the subject under investigation and creating a new study by analyzing the studies scanned by experts (Karaçam, 2013).
The systematic review consists of the following stages

a) Identifying the topic to be researched
b) detailed review of the literature
c) determination of the studies to be included in the research
d) recording the data obtained as a result of the examination
e) data analysis
f) reporting the results

The most important step of a successful research is to reach the correct and sufficient number of studies that will sample the universe, since the lack of a thorough review of the literature in systematic review studies may lead us to wrong information (Aslan, 2018). Therefore, a detailed analysis process was adopted in this study.

Data Collection And Analysis

In this study, national databases were searched in order to examine the studies on multiple intelligences theory in Turkey between the years 2006-2021. The reason why the researches were chosen especially between these dates is that current researches on the theory of multiple intelligences are wanted to be discussed. For this purpose, the databases of Dergipark, Asos Index, Turkish Education Index and TUBITAK ULAKBİM were searched and 30 articles were examined. The reason for using these databases; They host works published in Turkish, offer open access and do not require paid membership. As keywords in searches; multiple intelligences, multiple intelligence theory, intelligence fields expressions were used. The theses and books found were not included in the research, only the articles were included in the analysis.

The literature search process continued from October 2021 to November 2021. The transfer of the researches reached in the scan to the relevant parameters was carried out in December 2021. Therefore, studies published after December 2021 are not included in this article. Expert opinion was consult in December on the suitability of the relevant studies to the current study context, and the findings part of the study began to be written. The researches reached as a result of the scanning were recorded as full text. Each of these studies was coded in Excel under certain variables. These variables are; publication year, purpose, method, design, sample, data collection tools, data analysis methods, the course studied, results and suggestions. The studies included in the study were examined in line with these variables and codes were created. The themes in which the codes are combined are also the components that make up these variables.

Validity and Reliability Measures

In this study, help was received from an expert who had worked on systematic compilation before and from an expert who is currently working on systematic compilation, and the theme-code list was created together. In order to ensure the validity of the study, the researcher took care to explain each step of the research process in detail. ***Verilerin Analizi***
Biçim ve stili değiştirmeden buraya yazınız..

Results

The studies examined within the scope of this study were coded according to the determined parameters and themes were reached. The findings of the themes are explained in order. First, the publication year of the studies and the journals in which they were published are presented in Table 1.

Table 1. Distribution of Studies on Multiple Intelligences Theory by Years and Journals Published

Years	Journal Name	*f*
2006	H.U. Journal of the Faculty of Education (2), Mehmet Akif Ersoy University Education Faculty Journal (1), Ahi Evran University Kırşehir Education Faculty Journal (1), Values Education Journal (1), Uludağ University Education Faculty Journal (1)	6
2007	Uludag University Journal of Education Faculty (1), Ahi Evran University Journal of Education Faculty (1)	2
2008	Education and Science Journal (1), Education Theory and Practice Journal (1), Pamukkale University Education Faculty Journal (1), Primary Education Online Journal (1), Mehmet Akif Ersoy University Education Faculty Journal (1)	5
2009	Turkish Journal of Educational Sciences (1), Journal of Ahi Evran University Kırşehir Education Faculty (1)	2
2010	Pamukkale University Journal of Social Sciences Institute (1), West Anatolian Journal of Educational Sciences (1), Selçuk University Journal of Social Sciences Institute (1)	3
2011	Dicle University Ziya Gökalp Education Faculty Journal (1), Mehmet Akif Ersoy University Education Faculty Journal (1), International Journal of Human Sciences (1), Turkish Educational Sciences Journal (2), İnönü University Education Faculty Journal (1), Mehmet Akif Ersoy University Journal of Graduate School of Natural and Applied Sciences (1), Journal of Health Sciences (1)	8
2012	Kastamonu Journal of Education (1), Journal of Sports and Performance Research (1), Journal of Bartın University Faculty of Education (1)	3
2021	Journal of Computer and Educational Research (1)	1
	Total	30

According to the coding result in Table 1, no research on the theory of multiple intelligences could be found after 2012 until 2021. 1 article in 2021, 2 articles in 2007 and 2009, 3 articles in 2010 and 2012, 5 articles in 2008, 6 articles in 2006 and 8 articles in 2011 were reached. As seen in Table 1, it was understood that most of the articles were published in the journals of the faculty of education. The distribution of the related studies according to the courses is presented in Table 2.

Table 2. Distribution of Studies on Multiple Intelligences Theory by Courses

Lessons	*f*
Math	6
Physics	2
Life Science	2
Turkish	1
Science	5
Geography	1
Biology	1
Painting-Work	1
Unspecified	11
Total	30

According to Table 2, no course was specified in 11 of the studies. Six studies from mathematics, five from science lessons, two each from physics and life science lessons, and one study from Turkish-geography-biology and painting work lessons were reached.

The codes and frequencies related to the purpose of conducting the relevant studies are presented in Table 3.

Table 3. Distribution of Studies on Multiple Intelligences Theory According to the Purposes of Conducting

Themes	Categories	Codes	*f*
Aim	Teaching	Subject Teaching (10) Permanence of learning (4)	14
	Getting An Opinion	Teachers' Views on Multi-Intelligence-Based Teaching (6) Students' Views on Multiple Intelligences (4) Parents' Views on Multi-Intelligence-Based Teaching (2)	12
	Attribution	Student-Intelligence Field Relationship (5) Teacher Intelligence Field Relationship (4)	9
	Other	Predict the Future (1)	1
Total			36*

* The high frequency values are due to the fact that more than one purpose was determined in the same study.

When the aims of the studies are examined in Table 3, it is seen that the studies on the theory of multiple intelligences for teaching purposes are the most. Apart from this, 12 opinion determination studies, 9 relationship determination studies and 1 research different from other codes were reached. The distribution of the related studies according to the preferred method, design, sample, data collection tool and data analysis method is presented in Table 4.

Table 4. Distribution of Preferred Methods and Patterns, Sampling, Data Collection Tools, Data Analysis Methods in Research on Multiple Intelligence Theory

Themes	Categories	Codes	*f*
Method/Pattern	Quantitative	Semi-Experimental (15)	27
	Qualitative	Scanning Model (12) Holistic Single Case (2) Phenomenology (1) Unspecified (1)	4
	Mixed		4
	Total		35*
Sample Level	Teacher		7
	Teacher Candidate		4
	Preschoolers		1
	Primary School Students		5
	Middle School Students		9
	High School Students		6
	College Students		1
	Total		33*
Number of Samples	1-30		4
	31-50		4
	51-100		9
	101-200		5
	201-300		4
	300+		4
	Total		30
Data Collection Tools	Academic Achievement Test		13
	Attitude Scale		4
	interview Form		10
	Cognitive Skills Test		4
	Multiple Intelligence İnventory		14

	Other	2
	Total	37*
Data Analysis Methods	ANCOVA	7
	ANOVA	8
	Descriptive Analysis	4
	T-Test	14
	Content Analysis	4
	Correlation Analysis	4
	Chi-Square Test	2
	Mann Whitney U Test	2
	Other	4
	Total	49*

* Frequency values are too high; This is due to the use of more than one design, sample level, data collection tool and data analysis method in the same study.

When the methods and designs of the studies are examined in Table 4, it is seen that the most quantitative method is used. In these studies, 15 semi-experimental and 12 scanning designs were preferred. It is seen that the use of qualitative (f=4) and mixed (f=4) research methods is low. When the sample level of the related studies is examined, it is seen that the study was conducted with teachers in 7 studies, with prospective teachers in 4 studies, with pre-school students in 1 study, with primary school students in 5 studies, with secondary school students in 9 studies, with high school students in 6 studies, and with high school students in 1 study. When the number of samples is examined, it is seen that between 1-30 people in 4 studies, 31-50 in 4 studies, 51-100 in 9 studies, 101-200 in 5 studies, 201-300 in 4 studies, and 300 or more people in 4 studies. It is understood that the multiple intelligence inventory, academic achievement test and interview form were mostly used as data collection tools in the studies. Apart from these, the attitude scale and cognitive skill tests were used four times each. In 2 studies, different data collection tools were assisted. It is seen that t-test is mostly used as a data analysis method in studies. In addition, descriptive analysis, content analysis and correlation analysis 4 times; chi-square test and Mann Whitney U test 2 times each; ANCOVA was used 7 times and ANOVA 8 times. Apart from these, different analysis methods were used in 4 studies. The theme structure, in which the results obtained from the related studies are formed, is presented in Table 5.

Table 5. Distribution of Studies on Multiple Intelligences Theory According to Results

Themes	Categories	Codes	*f*
Result	Views on the Use of Multiple Intelligences Method	Positive Opinion (7)	10
		Negative Opinion (3)	
	The Effect of Using Multiple Intelligence Methods on Other Skills	Positive Effect (16)	20
		Neutral Effect (4)	
	Identification of Multiple Intelligence Domains	Finding the Relationship Between the Variables and the Dominant Intelligence Area (4)	9
		Finding the Advanced Intelligence Field (5)	
	Total		39*

*The high frequency values are due to the fact that more than one result is obtained in the same study.

In Table 5, the results obtained from the studies on the theory of multiple intelligences are summarized. According to the table, 10 of the results are related to the positive and negative views on the use of the multiple intelligence method, 20 of them are related to the positive and neutral effects of the method on other skills, and 9 of them are related to the determination of the multiple intelligence field. Finally, the code list of the suggestions presented in the studies is presented in Table 6.

Table 6. Distribution of Suggestions Presented in Research on Multiple Intelligence Theory

Themes	Categories	Codes	*f*
Suggestions	Suggestions for Teachers	Increasing Multiple Intelligence Applications (10)	12
		Planning the Lessons (2)	
	Suggestions for the Ministry of National Education	Arrangement of Curriculums (8)	21
		Organizing In-Service Training (9)	
		Organizing Learning Environments (4)	
	Suggestion for Researchers	Repetition with Different Sample Group (2)	11
		Examining its Relationship with Different Skills (6)	
		Examination of Its Use in Different Courses (3)	
	Other		4
	Unspecified		1
	Total		49*

* The high frequency values are due to more than one suggestion in the same study.

Table 6 summarizes the suggestions presented in research on multiple intelligences theory. Accordingly, 12 of the suggestions are for teachers, 21 for the Ministry of National Education, and 11 for researchers. Apart from these codes, there are 4 more suggestions. In one study, no suggestion were presented.

Conclusions and Suggestions

In this study, a total of 30 articles that can be accessed in the literature on the theory of multiple intelligences were examined. In the study, firstly, the distribution of the articles according to the years and the journals in which they were published was examined, and no articles were found after 2012 until 2021. 2012-2013 period is also the years when the 12-year compulsory education system (4+4+4 education system) started (Ministry of Education, 2012). With this change, many innovations were made in the education system. Therefore, the reason why the article on teaching multiple intelligences could not be reached between these years (2012-2021) can be attributed to the efforts to understand the innovations made and not knowing how to adapt multiple intelligences to these innovations. In addition, the fact that the highest number of studies was reached in 2011 may be due to the fact that a

long time has passed since the changes made in 2005 (Ministry of Education, 2005) and new searches have been made in the education system.

The main purpose of the multiple intelligence theory, which is the subject of the research, is to ensure that individuals know which intelligence area is dominant and be aware of themselves in order to integrate into society. This requirement makes it necessary to provide students with experiences that can recognize and develop multiple intelligence areas and to differentiate methods and techniques in this direction (Başaran, 2004). When the articles examined in this study were examined, it was seen that the most research was done on science and mathematics courses (Table 2). The reason for this may be related to the structure of verbal lessons. Researchers' preference for numerical courses will eliminate this difficulty. However, thinking in this way will be perceived as accepting the limitations of multiple intelligence theory-based education. Therefore, research should also be applied to verbal courses and it should be proven that the theory of multiple intelligences is not only effective for numerical courses.

Considering the distribution of the articles examined for this study according to their purposes, it was seen that the researches were mostly collected in the theme of teaching. In this theme, it was determined that the purpose of teaching the subject was generally examined (Irmak and Celik, 2021; Azar et al., 2006; Yildirim, 2006; Demirci and Yagci, 2008; Öngören and Şahin, 2008; Oral and Doğan, 2010; Baki et al. 2009; Yıldırım and Tarım, 2008; Işık et al., 2007; Uzunöz and Akbaş, 2011). It is seen that these studies have been carried out in order to understand how much more effective the theory of multiple intelligences is than the traditional method. In addition, it is seen that studies aimed at obtaining opinions take up a lot of space in the literatüre (Irmak and Çelik, 2021; Azar et al., 2006; Demirel et al., 2008; Yenilmez and Bozkurt, 2006; Bektaş, 2006; Karamustafaoğlu et al., 2010; Çalışkan and Yenilmez, 2012; Yavaşdemir and Bayhan, 2011; Bozkurt and Yenilmez , 2008; Koşar, 2006; Ayaydın and Özsoy, 2011). A total of 12 studies were found in order to get opinions from both students, parents, teachers and teacher candidates. Because, in addition to the effectiveness of the multiple intelligence method in education, the views on its applicability are also important in terms of replacing the traditional method. This may be the reason for the large number of studies aimed at obtaining opinions. Studies other than these studies were carried out on determining the field of multiple intelligences and predicting the future. The reason for the researchers to carry out the studies based on these purposes may be to determine the multiple intelligence area and to guide the individuals according to the intelligence area. While this aim was pursued in one of the studies, the existence of this aim is also detected in other studies.

It is seen that most of the researchers examined were carried out with quantitative research method and this method was used only with quasi-experimental and scanning designs (Table 4). It was determined that qualitative research designs were not preferred much, and 1 of the preferred designs in 4 qualitative research was not specified. The reason why the quantitative method is highly preferred may be to understand more clearly the differentiation between multiple intelligence theory and traditional method in research. However, the low use of qualitative research methods is a limitation in the literature. The fact that researchers have difficulties in adapting their qualitative research methods to the

theory of multiple intelligences can be considered as the reason for this limitation. In terms of literature, there is a need for studies conducted with qualitative research method.

Considering the sample levels of the studies, it was determined that mostly worked with secondary school student (Irmak and Çelik, 2021; Demirci and Yağcı, 2008; Öngören and Şahin, 2008; Yenilmez and Çalışkan, 2011; Baki et al., 2009; Uysal and Eryılmaz, 2006; Yıldırım and Tarım, 2008; Çalışkan and Yenilmez, 2012; Ayaydın and Özsoy, 2011) , and secondly, they worked with teachers from different branches (Yenilmez and Bozkurt, 2006; Demirel et al., 2008; Karamustafaoğlu et al., 2010; Çalışkan and Yenilmez, 2008; Bozkurt and Yenilmez, 2008; Genç, 2012; Koşar, 2006). The reason why the majority of the samples consisted of secondary school students can be attributed to the fact that this group is more accessible and open to communication. However, studies are required for sampling at all levels related to the theory of multiple intelligences. In this way, it can be compared whether there is a differentiation in intelligence areas according to age and education level. On the other hand, the reason for the selection of teachers may be to obtain information about the practitioners of this theory in the education system.

When the sample numbers are examined, it is seen that the study is carried out in the 51-100 frequency range at most. It can be said that the number of samples is high because more quantitative research methods are used in the studies. The fact that there are 13 studies with a sample number of 101 or more strengthens this idea. Working with such high frequency samples may have been preferred in order to better understand how the group in which the multiple intelligence theory-based education is given differs from the traditional group and to make sense of the effect of multiple intelligence theory and how intelligence areas differ according to the variables in individuals. Apart from these, getting opinions from more samples will help to understand the thoughts of the samples about the theory of multiple intelligences more clearly. The over-selection of the sample size by the researchers can also be attributed to this reason.

When the theme of the study's data collection tools is examined, it is determined that the academic achievement test is mostly used due to the examination of the researches for learning purposes. The reason for this situation may be that the academic achievement test reveals the difference between the traditional group and the group that receives education based on the theory of multiple intelligences, with more concrete results. It is seen that the multiple intelligence inventory is also used extensively in studies. The use of this inventory is a natural situation. Because it is a necessity to use this inventory to determine the multiple intelligence domain. Apart from these, the interview form is one of the most used tools. Because in the studies examined, the views of the samples on the theory of multiple intelligences have an important place in terms of the applicability of the theory. It can be thought that the researchers made these interviews in order to understand the factors that make this theory different from the traditional method. As seen in Table 4, more than one tool was used in a study. The reason for this may be that researchers want to make sense of different variables as well as the efficiency of education based on the theory of multiple intelligences.

When we look at the data analysis method theme, it is determined that the t-test is used more than other analysis methods due to the excessive use of the experimental design, one

of the quantitative research designs. This has also led to the use of ANOVA and ANCOVA methods. The fact that qualitative methods are not preferred much may have caused the low use of analysis methods specific to qualitative data.

Looking at the result theme of the studies, it was seen that the effect of multiple intelligence supported teaching on other skills was examined and in most of these studies, multiple intelligences had a positive effect on other skills. The fact that most of the results obtained from the studies are effective reveals that multi-intelligence supported education is more beneficial than traditional education in every sense. However, the conclusion that multi-intelligence-supported education did not have any effect on other skills in 4 studies leads us to question how accurate analyzes are achieved in studies with positive effects. The reasons such as the students' realization that they are in a research and the researchers and teachers making a special effort to ensure differentiation may have caused the majority of the results to be positive. In addition, the fact that positive opinions about multiple intelligences are more than negative ones can be attributed to these factors. Apart from these, it is a striking result that multi-intelligence supported education has no effect on other skills. The creation of new studies inspired by these studies is necessary for us to understand the reasons.

The theme of suggestion is also included in the study. In most of the studies examined in this theme, it has been suggested to increase the applications of multiple intelligences. However, no in-depth proposal has been prepared on how to increase these practices and how to plan time. After this recommendation, the most frequently repeated recommendation concerns the provision of in-service training. Apart from these, researchers were suggested to conduct new researches and it was said that comparison studies should be supported. In this way, the validity and reliability of these studies will also be examined.

Based on the results of the study in which the systematic compilation of studies on multiple intelligences was made, some suggestions were prepared.

In order to determine the contributions of multiple intelligence theory-based education to traditional education, new studies can be done by considering different variables and these studies can be compared with previous studies. As a result of this study, there is a lack of qualitative studies in the literature. This means that more experimental studies are carried out in the field of multiple intelligences. Therefore, theoretical and in-depth studies should be carried out. It is striking that studies on the theory of multiple intelligences are generally used in numerical courses. New studies can be conducted in which the theory of multiple intelligences is adapted to verbal lessons.

Author Contributions

All of the authors have contributed equally to this article.

Conflict of Interest

The authors declare there is no conflict of interest in this study.

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