REVIEW ARTICLE

ANALYZING OF DOCTORAL THESIS CONTEXTUALLY COMMITTED ON MULTIPLE INTELLIGENCE THEORY IN TURKEY BETWEEN YEARS 2000-2013

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ABSTRACT

This study, in our country purposed to analyse contextually thesis committed on multiple intelligence theory and to reveal general trends in this field. In the study has been done analysis of content of doctoral thesis committed between years 2000-2013. Scanned thesis database of general directorate of higher education institution (YOK); reached to total 46 thesis in database. For to analyse of thesis is used classification system developed by Ciltas, Guler and Sozbilir (2012). At the end of study has been detected that relative to multiple intelligence theory before year 2001 didn' t do any study in doctoral field. After year 2003 number of thesis prepared in doctoral field increased and was determined that reached to the highest number in 2010. In the study detected that most of prepared thesis according to multiple intelligence theory so an education appeals to a lot of intelligence field academic success of student, the subsistence of learned knowledge and to search effects of attitudes towards the lesson. When analyse thesis from the point of working group detected that most studied groups are students. In committed thesis is used more often experimental research model, was determined that test and scales often preferred in data collection. More than 50% of thesis analysed used predictive analysis method taking part parametric statistical analysis and sample size ranged from 31-100. In conclusion, can be said that study remains limited with thesis published and allowed to Access in center of national thesis of general directorate of higher education institution. But even this limited study showed that will contribute big to teaching education based this theory contributed important to knowledge subsistence, attitude and student success in education. This study will help on subject to researchers who want to use multiple intelligence theory in which areas they have to be required necessity. Also will reveal in our country general trends of doctoral thesis committed with multiple intelligence theory.

INTRODUCTION

What is a matter of intelligence and scientists has occupied for years how to define. Therefore, many scientists have spent a lot of time over which it is necessary to define what intelligence is and how (Selçuk, Kayılı ve Okut, 2000). Although there are many definitions of intelligence made the case that is made of different definitions of different branching pattern science. The reasons for that, intelligence is so tangible and intangible visible scientists of different approaches to the concept of intelligence as it is effective to have an object has played an important role. Some scientists intelligence, intelligence as a whole, some scientists trying to explain and discuss the mental, emotional, and tried to arguing that the effect of several factors such as social statement (Baş, 2011). The concept "Intelligence" and "IQ"

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testing in 1983, Harvard University academics Howard Gardner's "Frames of Mind:The Theory of Multiple Intelligences" (Frames of Mind: Multiple Intelligences Theory) by writing the book has become a very different size (Gardner, 1983). After the disposal of Multiple Intelligence Theory numerous articles appeared not only in our country domestic and outside, is made thesis of master's and doctoral. First time in the world 'Multiple Intelligences' app in America' Indianapolis-8 Elementary School first study in Turkey, while the 1997-1998 academic year in Ankara Tevfik Fikret High School, Primary School by Demirel. Continue to be made in Turkey in the following years a number of studies have been and are observed from the literature which is quite an increase in the number of studies, especially after 1998 (Açıkgöz, 2003, Bümen, 2001; Başbay, 2000; Coşkungönüllü, 1998; Demirel, 1998; Selçuk, Kayılı and Okut, 2000; Tarman, 1999).

In the world and in our country is carried out important studies on Multiple Intelligence Theory. This work should continue on

the theoretical foundations of the theory, which continues to be both academic studies and school practice the application of the data obtained from the results of this study. Made on a topic examining and analyzing scientific thesis, on the one hand to reveal that the subject and the overall appearance of depth in the investigated area on the one hand, while information on the prevalence. The aim of this study in Turkey, "Multiple Intelligences" is made on the doctoral thesis examined in terms of their content.

The study sought to answer the following research questions;

1. How is the distribution of doctoral thesis in years and languages done between years 2000-2013 on Multiple Intelligence Theory?
2. How is the distribution of doctoral thesis in university/faculty/institute between years 2000-2013 on Multiple Intelligence Theory?
3. How is the distribution of doctoral thesis according to frequently studied area between years 2000 2013 on Multiple Intelligence-Theory?
4. What is working group and working group size used often in doctoral thesis committed between years 2000-2013 on multiple intelligence theory?
5. What are research methods used often in doctoral thesis committed between years 2000-2013 on multiple intelligence theory?
6. What are data collection tools used often in doctoral thesis committed between years 2000-2013 on multiple intelligence theory?
7. What are data analysis methods used often in doctoral thesis committed between years 2000-2013 on multiple intelligence theory?

Data collection tools

To analyse thesis has been revised by adapting to this study publication classification form developed by Ciltas, Guler and Sozbilir (2012). Publication classification form; is formed from seven chapters including thesis identity, department of thesis, subject, method, data collection tools, sampling, data analysis method.

Analysis of datas

Datas obtained with publication classification form are presented after registered results converted to fequency, percentage and graphic and table. Doctoral thesis reached from official web site of national center of thesis general directorate of higher education institution distribution by years, working field, working group and size, used language, used research models, data collection tools, classification of used statistical techniques in datas analysis, are presented in table and graphics (YOK, 2013).

METHODS

In this study is used content analysis method because of will servet o aim of the study. Content analysis is a method that allows verbal, written and to analyse systematic and objective of other materials (Tavsancil and Aslan, 2001 active: Sert vd,

2012). Content analysis; are systematic studies that provide the evaluation in definer dimension of research results and general trends of discussed studies (Calik ve Sozbilir, 2014).

Indications

Table 1. Number of thesis reached from YOK database

Key word	Searching field	Searching type	Number of thesis
Multidimensional intelligence theory	All field	Inside	35
Multidimensional intelligence theory	All field	Inside	15
Dominant intelligence type	All field	Inside	2
Multidimensional intelligence theory	All field	Inside	1
Total			53

In process of scanning thesis scanned thesis database of general directorate of higher education institute (YOK) reached to different number of thesis depending searching measure. Considering the data presented in Table ;

- When written to searching Word **multiple intelligence theory** in all fields appears multiple intelligence theory between years 2000-2013 scanned approved doctoral thesis are listed 35 thesis.
- When written to searching Word **multiple intelligence fields** in all fields appears multiple intelligence theory between years 2000-2013 scanned approved doctoral thesis are listed 15 thesis.
- When written to searching Word **dominant intelligence type** in all fields appears multiple intelligence theory between years 2000-2013 scanned approved doctoral thesis are listed 2 thesis.
- When written to searching Word **multidimensional intelligence theory** in all fields appears multiple intelligence theory between years 2000-2013 scanned approved doctoral thesis is listed 1 thesis.

During searching 7 of 53 thesis reached are common thesis in this study are examined with content analysis method approved 46 doctoral thesis based to multiple intelligence theory. This thesis; are examined according to thesis year, thesis language, university, institute, working area, working group and size, research model, data collection tools, used statistical analysis. In research enclosure datas obtained from thesis analysed with content analysis are resolved using percentage and frequency as descriptive statistical methods.
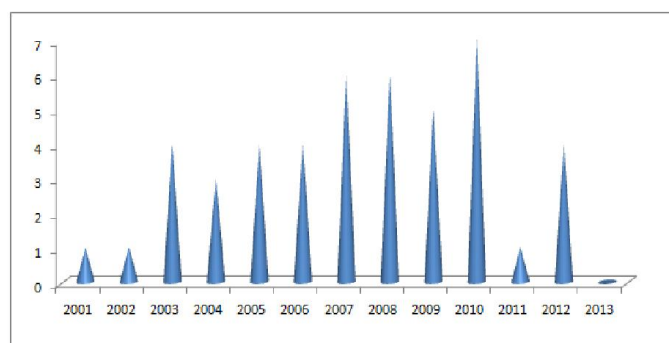
Graph 1. Distribution of analyzed theses by year

According to YOK database (Graph 1); doctoral thesis in the area of multiple intelligences was not prepared until 2001.The number of theses prepared in the field of doctorate increased after 2003 and the highest number has been achieved in 2010.But in 2013 no approved doctoral thesis can be found.
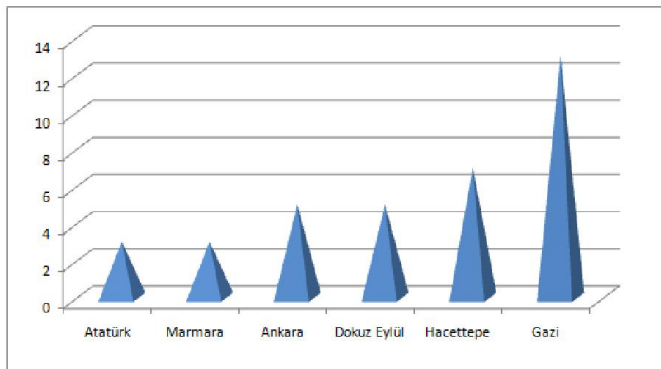
Graph 2. Distribution of analyzed theses according to universities

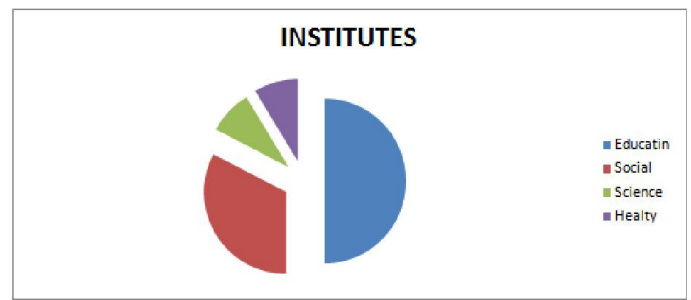**Chart 2. Distribution of analyzed theses according to universities**

University Name	f	%
Anadolu	1	2
Selcuk	1	2
Istanbul	1	2
Odtu	1	2
Cukurova	2	4
Katu	2	4
Uludag	2	4
Marmara	3	7
Ataturk	3	7
Ankara	5	11
Dokuz EYLUL	5	11
Hacettepe	7	15
Gazi	13	28
Total	46	100

According to YOK database (Graph2, Chart2) 1 PHD thesis in Selcuk, Istanbul, Anatolia and Middle East Technical Universities, 2 PHD theses concerning multiple intelligences in Uludag, Cukurova and Karadeniz Technical Universities are present. In the Universities of Ataturk and Marmara 3, Ankara and Dokuz Eylul 5 and Hacettepe Universities 7 doctoral theses are present. And Gazi University is the university with the highest number of 13 doctoral theses.

Graph 3. Distribution of analyzed theses according to languages

In the datas (Graph 3) in YOK database while the language of 6 out of 46 examined theses is English, the language of 40 is Turkish.
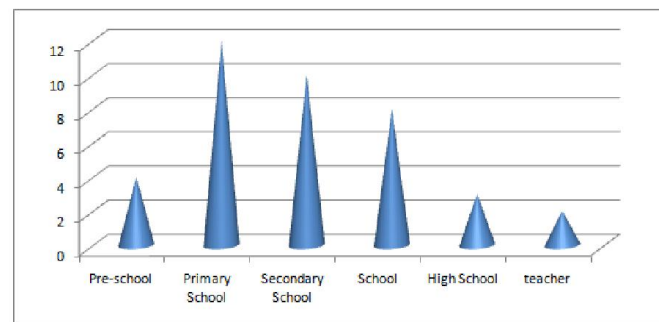

Graph 4. Distribution of analyzed theses according to institute

**Chart 3. Distribution of analyzed theses according to institute**

Institute Name	f	%
Educational Sciences	23	50
Social Sciences	15	33
Science	4	9
Health Sciences	4	9
total	46	100

While the Institute of Educational Sciences containing 23 out of 46 examined theses in YOK database is the institute with the maximum number, Institute of Social Sciences takes the second place with 15 theses.

Grafik 5. Distribution of theses according to working group

Due to the inaccessibility to content of 7 out of 46 theses, working groups of 36 theses were examined (Graph 5). In the 3 examined theses study groups were selected from two different groups. While it is students and teachers in two theses in 1 thesis it is pre-school students and 1st grade students. In 18 of the 46 examined theses no information could be reached in terms of working size.
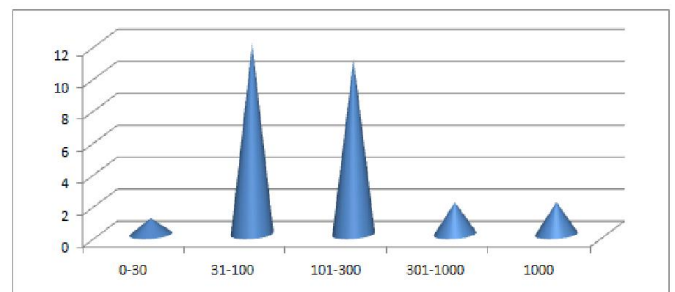
Graph 6. Distribution of doctoral theses according to the size of the working group

Chart 4. Distribution of theses according to working group

Sample	f	%
Pre-school	4	10
Elementary school	12	31
Junior high school	10	26
High school	8	21
License	3	7
Teacher	2	5
Total	39	100

Chart 5. Distribution of doctoral theses according to the size of the working group

Sample Size	f	%
Between 11-30	1	4
Between 31-100	12	43
Between 101-300	11	39
Between 301-1000	2	7
More than 1000	2	7
Total	28	100

Of the 46 examined doctoral theses in YOK database; the majority of the doctoral studies of multiple intelligences theory is carried out on primary and secondary school students and the size of the study group is concentrated between 31-100 (Chart 4, Chart 5, Graph 6).

Chart 6. Distribution of doctoral theses according to data collection tools

Data Collection Tools	f	%
Survey	8	9.19
Achievement test	17	19.5
Interest/attitude/retention test	23	26.43
Conversation/Interview	8	9.19
Observation	8	9.19
Multiple Intelligences Scale	13	14.9
Inventory	4	4.59
Diary	1	1.14
Information form	4	4.59
Documents	1	1.14
TOTAL	87	100

Of the 46 examined doctoral theses in YOK database; Tests and Scales seems to be the most commonly used data collection tools. And Survey, Interview and Observation takes the second place. Inventory, Information form, Diary and Documents are the less preferred tools (Chart 6).

Chart 7. Distribution of statistical analysis used in theses

Data Analysis Method	f	%
Descriptive	13	19.6
Forecasted	38	57.5
Qualitative data analysis	15	22.7
Total	66	100

To determine the data analysis methods used in 46 multiple intelligences doctoral theses examined in YOK database, their statistical analysis methods are grouped under three headings by us.

1. Descriptive analysis where the frequency and percentage calculations, graphical representations of average and standard deviations are calculated is found.
2. Forecasted analysis where the parametric and nonparametric analysis namely the t-test takes place, analysis such as the correlation analysis, variance analysis are made.

3. Qualitative data analysis where the content analysis, qualitative descriptive analysis are made

When the datas presented in Chart 7 are examined it is observed that forecasted analysis are more commonly used in studies.

Chart 8. Distribution of examined theses according to research model

Research Model		f	%
	Full Experımental	18	64
	Quası-Experımental	5	18
Experımental Model	Sıngle Subject	2	7
	Weak Experımental	-	-
	Correlatıonal	1	4
Non-Experımental	Descrıptıve	2	7
Model	Total	28	100

When are examined datas presented in Table 8 doctoral thesis in multiple intelligence field seen that it is examination model preferred in 25 on 28 thesis reached to experimental study model content divided in full experimental, half experimental, poor experimental and single subject experimental. As for in experimental study model most preferred model is full experimental model. As for remaining 3 thesis was used descriptive and correlational study model located within the non-experimental study model.

DISCUSSION AND CONCLUSION

In this study classified 46 doctoral thesis allowed to Access at the official web site of national center of thesis of higher education institute and occurred between years 2000-2013 examined with content analysis method. Different topic titles as thesis year, thesis language, university, institute, working area, working group and size, research model, data collection tools, used statistical analysis are categories formed for the examination of thesis.

In the analysis were reached to those following conclusions

1 In multiple intelligence field before year 2001 didn' t do any study in doctoral field. After year 2003 number of thesis prepared in doctoral field increased and was determined that reached to the highest number in 2010.
2 Most doctoral studies in multiple intelligence field were seen belonging to Hacettepe and Gazi universities.
3 Thesis done in multiple intelligence field most of them preferred Turkish as language.
4 Most of doctoral studies in multiple intelligence field were seen belonging to education sciences institute. Because is forming basis of studies done in this field what kind of contribution will provide teaching to education with multiple intelligence theory.
5 In the examination done that most of prepared thesis according to multiple intelligence theory so an education appeals to a lot of intelligence field academic success of student, the subsistence of learned knowledge and to search effects of attitudes towards the lesson. As for remaining majority formed thesis examined to student success and attitude a proper education method that will appeal to dominant intelligence field determined according multiple

intelligence theory. As seen these studies are more within the working field of educational sciences institute.

6   When analyse thesis from the point of working group detected that most studied groups are students. Especially for a better reflection of theory in teaching will be observed in primary school students so focus group was the elementary school students.

7   Although the other focus group of teaching were teachers, so teachers were less preferred in the study group. But, even if just a bit in a few thesis determining multiple intelligence profiles of teachers with choosen education method between dominant intelligence type have been tried to establish a relationship.

8   In the examination has been determined that more commonly used experimental models at thesis. Full experimental models of experimental researchers of the field randomly selected experimental and control groups are more preferred. Because most of the arguments based on the multiple intelligence theory teaching is to investigate the effect of the student's knowledge, attitude and persistence. These studies aim to reach but the front and the experimental and control groups included the application of the final test that is made possible by experimental studies.

9   According to the results obtained in the studies most commonly used data collection tools are test and scales. When examined together Research models and data collection tools is used in most of thesis experimental model. In the experimental model test, Scale, survey researchers as clear and quantitative data will provide the kind of data collection tools. In the variety of data collection tools used depending on the type of the research model can be explained as a natural consequence of this situation (De Jong, 2007).

10 Involving parametric statistical analysis of more than 50% of the theses of forecasted analysis method is used. When parametric test sample of 30 large and considering the information used in the study observed a normal distribution, 31-100 between the concentration of the sample size is consistent with this information. In conclusion, the national center of thesis Higher Education Institute said that published and allowed access to the thesis remains limited.

However, even this limited study of student achievement in education theory of multiple intelligences, attitudes and knowledge that contribute significantly to the stability showed that contribute greatly to the education of instruction based on this theory.

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