Curr Res Educ (2015), 1(2) · 70 - 75

ARAŞTIRMA MAKALESİ

A Critical Analysis of Turkish Research Studies on the Multiple Intelligences Theory*

Ayşenur DÖNDER[**1] – Veli BATDI[1] – Burhan AKPINAR[1]**

[1] Fırat University, Faculty of Education, Department of Educational Sciences, Elazığ, Turkey

* This study was presented as oral presentation at WCLTA 2012.

Abstract

The purpose of this study was to analyse Turkish postgraduate theses on the Multiple Intelligences Theory between 2001 and 2012 from a critical perspective. The study employed document scanning and analysis. The data comprised 116 postgraduate theses, mostly written in 2006, and the experimental method was largely employed. On the basis of these theses, Multiple Intelligences Theory improves the permanence of learning but fails to show much improvement in students' attitudes towards the classroom.

Keywords: Multiple intelligences theory, Turkey, master's theses.

Türkiye'de Çoklu Zeka Kuramı Üzerinde Yapılmış Araştırmaların Eleştirel Analizi

Öz

Bu çalışmanın amacı, 2001-2012 yılları arasında Türkiye'de *Çoklu Zeka Kuramı* üzerine yapılmış olan lisansüstü tezleri eleştirel bakış açısı ile analiz etmektir. Çalışma, belgesel tarama ve doküman analizi türünde yürütülmüştür. Çalışmanın verilerini, konuyla ilgili yapılan 116 lisansüstü tez oluşturmuştur ve yapılan tezlerin çoğu 2006 yılında yapıldığı ve yöntem olarak da çoğunlukla deneysel yöntemin kullanıldığı belirlenmiştir. Sözü geçen tezlerin sonucu olarak da, Çoklu Zeka Kuramının öğrencilerde kalıcılığı arttığını; fakat derse yönelik tutumlarında pek fazla artış sağlayamadığı belirlenmiştir. Ancak sözü geçen bu tezlerin yöntem olarak tartışılabilir olması göz önüne alındığında, bu sonuçların da tartışmaya açık olduğu söylenebilir.

Anahtar Kelimeler: Çoklu zeka kuramı, Türkiye'de çoklu zeka kuramı, lisansüstü tezler.

** *Sorumlu Yazar: Fırat University, Faculty of Education, Elazığ, Turkey adonder@firat.edu.tr*

1. Introduction

The Multiple Intelligences Theory (MIT) is the result of a remarkable study conducted by Gardner in the 1980s which asserted that every human being has a different type of intelligence. Attracting

considerable attention, especially from the education world, the theory meant that ideas about individual qualifications were entirely altered (Altan, 2011). Gardner (1998) introduced a different perspective by stating that individuals can better be defined through many independent intelligence areas rather than a single way of thinking within a certain pattern and accordingly by calling the way of thinking used in order to analyse a problem during the acquisition of knowledge as intelligence. Identifying seven types of intelligence initially, Gardner (1983) added an eighth and ninth type (Musical–rhythmic and harmonic, Visual–spatial, Verbal–linguistic, Logical–mathematical, Bodily–kinesthetic, Interpersonal, Intrapersonal, Naturalistic, Existential**)**. Via these intelligence types, the definition and evaluation of intelligence in a wide sense are rendered possible. The theory addresses various intelligence areas that enable students to learn in personal learning environments. The theory addresses content and learning outcomes (Chen, 2005). MIT became part of the Turkish education system following educational reform in 2004. One of the primary reasons why the Ministry of National Education (MEB) included the theory as part of the curriculum was to keep pace with modern developments (Akpınar and Doğan, 2012). The criticisms made regarding MIT include the assertions that the theory lacks an experimental-scientific basis (Brody, 1992; Kincheloe, 2004; Richardson, 1991), it is not comprehensible enough (McGuiness, 2007; Seebach, 2004) and its application in education is controversial (Sempsey, 1993; Waterhouse 2006). Its nonconformity with the Turkish education system is a further drawback. Considering the contribution of this theory to the education system and other scientific disciplines, the critical analysis of the researches conducted regarding multiple intelligences in Turkey was the overall objective of this study.

2. Method

This study, aiming to analyze the postgraduate theses written on the Multiple Intelligences Theory (MIT) in Turkey between 2001 and 2012 in terms of type of study, year of study, objective of study, method of study and result of study, is a descriptive study which used a document-scanning model. Document scanning is a way to collect data via looking through existing records and documents. It includes finding resources, reading, note-taking and evaluating within the scope of a certain objective (Karasar, 2005).

The data of the study consist of 102 postgraduate and 14 doctoral theses which were written between 2001 and 2012. These theses have been obtained from the Higher Education Council Documentation and International Literature Search Centre. Through the literature search conducted with the key words; Multiple intelligences and Multiple intelligences theory, 116 postgraduate theses directly related to multiple intelligences theory were found. For interpretation, the 'f' and '%' techniques from descriptive statistics have been used.

3. Findings and Interpretations

3.1. Demographic classification of theses related to MIT

3.1.1. Findings and Interpretations Concerning the Publication Years of the Postgraduate Theses Related to MIT

In terms of publication years, the distribution of the theses written regarding MIT in Turkey between 2001 and 2012 is given in Table 1.

Table 1. *Distribution of Theses on MIT by Publication Years*

Year	**2001**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
f	2	1	1	11	27	24	15	18	10	6	1
%	2.32	1.16	1.16	12.76	31.32	27.84	17.4	18.56	11.6	5.8	1.16

When the distribution of the theses on the practical effectiveness of MIT was analyzed in terms of the publication years listed in Table 1, it was seen that most of the studies belong to 2006, suggesting that the academic community had considerable interest in MIT when it had just been included in the Turkish Education System (TES). The decrease in studies related to the subject over the years can, however, be said to indicate less interest in the subject as time has passed. As one of the possible causes of this, since the researches carried out by the academic community haven't been taken into account by the system, it might lead to decrease in interest. Another possibility is that reaching a satisfying point in literature in course of time regarding MIT which drew heavy interest at first could reduce the interest of academics about the subject.

3.2. Findings and Interpretations Concerning the Method used in Postgraduate Theses on MIT

Table 2. *Distribution of Theses on MIT in Terms of Methods Used*

Method	**Experimental**	**Scanning Model**	**Qualitative**	**Other Studies**	**Total**
f	73	26	14	3	116
%	62.93	22.41	12.06	2.58	100

When Table 2 is examined, it can be seen that the experimental model has been used in most of the theses on MIT (f=73), the scanning model has been used for 26 of them, and the qualitative research model has been used for 14 of them. Other methods have been used for three theses: respectively, the sample activities related to MIT have been described, a scale has been created and a study on software development has been performed. The reason of using experimental method intensively in MIT studies may spring from positivist approach, using dominantly, in the academic community in Turkey and may be due to poorly understood of qualitative research. In addition, again as a reflection of the positivist tradition, academics' desire to achieve measurable and concrete results may have led them to prefer the experimental model.

3.3. Findings and Interpretations Concerning the Objectives and Results of Postgraduate Theses on MIT

Table 3. *Objectives and Results of Postgraduate Theses on MIT*

Objectives of the Theses	**F**	**Results of the Theses**	**F**
Does MIT have an influence on academic achievement and permanence of learning?	86	MIT is influential in increasing the academic achievement and permanence of learning.	72
		MIT is partly influential on increasing the academic achievement and permanence of learning.	14
Does MIT have influence on students' attitudes?	29	MIT is influential on increasing students' attitudes.	20
		MIT is ineffective on increasing students' attitudes.	9
Has MIT been reflected in the related textbooks?	11	MIT has been reflected in the related textbooks.	6
		Mostly social intelligence has been reflected in textbooks.	1
		MIT has not been reflected in textbooks.	1
		Not all intelligence types have been given equal importance in textbooks.	3
Does MIT have an influence on students' perception?	4	MIT has a positive effect on tudents' perception.	4
Teachers' remarks on the application of	24	MIT is a beneficial practice.	19

MIT.		MIT has no benefit in practice.	5
Does MIT have an influence on students' self-respect, self-confidence and motivation?	2	MIT is ineffective in terms of students' self-respect, self-confidence and motivation.	2
Analysis of MIT in terms of intelligence types.	5	MIT contributes less to the development of linguistic, musical and visual intelligence.	1
		Teachers do not have adequate knowledge about the contribution of MIT to guidance.	4
Analysis of MIT in terms of various variables.	3	There are significant differences between MIT and variables of gender, field of study and social environment.	1

When the objectives of the theses concerning MIT are examined, it can be seen from the data in Table 3 that most of them involve studies related to the effects of the theory on students' academic achievement. In the theses based on the objectives of study, it has been concluded that MIT increases (f=72) and partly increases (f=14) students' academic achievement. The conclusion reached by 29 studies conducted to determine the effect of MIT on students' attitudes is that MIT has a positive effect on students' attitudes (f=20) and it is ineffective (f=9).

The outcomes of eleven studies aimed at discovering how much MIT is reflected in the relevant textbooks are as follow: according to six studies, MIT has been reflected in the textbooks; not all intelligence types have been accorded equal importance (f=3), more emphasis has been given to social intelligence (f=1) and MIT has not been reflected in the textbooks (f=1).

According to the results of four studies analysing the influence of MIT on students' perception, this theory influences students' perception positively. The two studies on the effect of MIT on students' self-respect, self-confidence and motivation report negative results.

The teachers who apply MIT during class have the right to comment on this field more than anyone else. According to nineteen of twenty-four researches aimed at determining teachers' opinions of MIT, teachers find this theory beneficial and in five studies they regard it as useless. Other research reports that there are significant differences between MIT and gender, field of study and social environment. Considering the five researches addressing MIT in terms of intelligence types and guidance, it is concluded that this theory is limited in terms of developing linguistic, musical and visual intelligence (f=1) and teachers do not have adequate knowledge to guide students (f=4).

4. Conclusion and Suggestions

In conclusion, MIT, which has been included in the Turkish education system following reform and is still under discussion, could draw the attention of academics (heavier attention firstly). As a result, many studies, most of which are postgraduate theses, have been performed in the eleven years since then. These studies were written mostly in 2006 and 2007, which is understandable when we take into account that MIT was included in the Turkish education system (TES) in 2004. The same documents indicate that the experimental method has overwhelmingly been used in the academic studies performed on MIT in Turkey. As regards this preference, it can be asserted that the positivist tradition emphasizing measurable and concrete findings in the results of researches is influential. Another reason why the qualitative method has not been over-popular is that this relatively new approach is still unfamiliar to many. Among the reasons,

we can also mention about the non-acceptance of quantum and postmodern paradigm taken as references in the qualitative method by the academic community adequately.

When the studies (theses) conducted regarding MIT in Turkey between 2001 and 2012 are considered in terms of their objectives and results, it is clear that most of them deal with the effect of the mentioned theory on students' academic success and attitudes, followed by teachers' remarks on MIT. MIT has also been discussed in terms of its use in textbooks and its analysis by intelligence type. The fact that most of the studies on MIT are related to the efficiency of this theory in practice can be considered as a demonstration of the tradition of addressing education from the pragmatic perspective. This situation is comprehensible in the modern world where there is a direct relation between education and the economy. It should not, however, be overlooked that this tendency risks overshadowing the 'enlightenment' mission of education and commercializing education in the long term. Also, it should be noted that paying attention only to the economic aspects of education may damage its mission of protecting and sustaining culture. In that case, it may be beneficial to take into account the doubts, concerns and criticisms expressed regarding MIT. As regards the cited studies, the positive conclusions concerning MIT are limited by the suitability and consistency of the methods and the validity and reliability of the instruments and scales used in those studies. In fact, analysis showed that matching of subjects, application of testing procedure and the instruments and scales used are especially problematic in these studies. In that case, the conclusions put forward for the benefit of MIT in the mentioned studies may lead to doubts, which can be supported by a great deal of data consisting of the criticisms for MIT in the related literature. Lastly, MIT was included in the Turkish education system (TES) following the reform in 2004 namely a law although it was just a theory. Discussions on MIT have continued. From those discussions, it is clear that MIT which is a product of the Western world and controversial in terms of its compatibility with Turkish history, culture and practice should be discussed more seriously. Therefore, it can be said that MEB should show more sensitivity to the results when importing a theory to such a field as education, which is of national importance.

References

Akpınar, B. ve Doğan, Y. (2012). Analysis of the Turkish pre-service teachers' views on the theory of multiple intelligences. *African Journal of Business Management*, *6*(5), 1916-20.

Altan, M. Z. (2011). Çoklu zekâ kuramı ve değerler eğitimi. *Pegem Eğitim ve Öğretim Dergisi*, *1*(4), 53-7.

Brody, N. (1992). *Intelligence*. New York: Academic Press.

Chen, S. F. (2005). *Cooperative learning, multiple intelligences and proficiency: Application in college English language teaching and learning*. Unpublished Phd Thesis. Australian Catholic University, Faculty of Education, Australia.

Gardner, H. A. (1998). Multiplicity of intelligences: In tribute to Professor Luigi Vignolo. *Scientific American*.

Karasar, N. (2005). *Bilimsel araştırma yöntemi* (15. Baskı). Ankara: Nobel Yayın Dağıtım.

Kincheloe, J. L. (2004). *Multiple intelligences reconsidered*. New York: Peter Lang.

McGuiness, K. (2007). Multiple intelligences: A comment on Howard Gardner's ideas. http://www.nswagtc.org.au. Erişim Tarihi: 08.03.2011.

Richardson, K. (1991). Understanding intelligence. http:// www.igs.net. Erişim Tarihi: 23.3.2011.

Seebach, L. (2004). Scoping out multiple intelligences. http://www.shns.com/web/guest/home. Erişim Tarihi: 05.02.2011.

Sempsey, J. (1993). The Pedagogical İmplications of Cognitive Science and Howard Gardner's M.I. Theory. http://www.Is.Net/~Cmorris/Critiques.Html. Erişim Tarihi: 13.04.2011.

Waterhouse, L. (2006). Inadequate evidence for multiple intelligences, Mozart effect, and emotional intelligence theories. *Educational Psychologıst*, *41*(4), 247-255.

Appendix

Related theses (http://yok.gov.tr):

Master Theses:

Temur (2001), Akamca (2003), Bak (2004), Aydın (2005), Yıldız (2005), Yel (2005), Çepni (2005), Kuloğlu (2005), Çengeloğlu (2005), Öner (2005), Öz (2005), Saydam (2005), Bayrak (2005), Taşezen (2005), Altun (2006), Işık (2006), Moradaoğlu (2006), Aydoğan (2006), Oral (2006) , Öztürkmen (2006), Canbay (2006), Karatekin (2006), Demirkaya (2006), Çelen (2006), Yekrek (2006), Erkaça (2006), Güneş (2006), Şen (2006), Başli (2006) , Akar (2006), Uysal (2006), Yağcı (2006), Arabacı (2006), Karadeniz (2006), Babacan (2006), Yıldırım (2006), Çevik (2006), Akyüz (2006), Karakoç (2006), Gökçek (2007) ,Etli (2007), Hamurlu (2007), Kurtcuoğlu (2007), Ergin (2007), Şalap (2007), Bektaş (2007), Güney (2007), Öngören (2007), Meletli (2007), Ateş (2007), Şahin (2007), Taş (2007), Şengül (2007), Akkuş (2007), Yörük (2007), Kayıran (2007), Işık(2007), Ateş (2007), Tüter (2007), Altuntaş (2007), Sivri (2008), Bozkurt (2008), Altunkaya (2008), Kılıç (2008), Sezer (2008), Ercan (2008), Erdoğan (2008), Temel (2008), Koç (2008), Muradoğlu (2008), Tan (2008), Dikici (2008), İnaltekin (2008), Görer (2008), Kanat (2008), Değirmenci (2009), Demren (2009), Altun (2009), Erdamar (2009), Ünal (2009), Kum (2009), Kurt (2009), Kayıran (2009), Sivrikaya (2009), Kırıcı (2009), Tural (2009), Çoker (2009), Güçlüer (2009), Kalaycı (2009), Yıldız (2009), Modiri (2009), Balcı (2009), Atik (2010), Göl (2010), Konur (2010), Yılmaz (2010), Çepni (2010), Aydın (2010), Boztepe (2010), Elmacı (2010), Gülfil (2010), Arslanyolu (2010), Kırıcı (2011), Soylu (2011), Gözüm (2011), Yiğit (2011), Altınsoy (2011), Tufan (2011), Kaya(2012).

Doctorate Theses:

Bümen (2001), Kırmızı (2006), Nacakcı (2006), Pedük (2007), Yeşilkaya (2007), Görücü (2007), Gürbüzoğlu (2009),