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AKDENIZ UNIVERSITY

INSTITUTE OF EDUCATIONAL SCIENCES

FOREIGN LANGUAGES TEACHING
DEPARTMENT

MASTER OF ARTS THESIS

THE USE OF MULTIPLE INTELLIGENCES IN TURKISH EFL TEXTBOOKS

RAMAZAN ÖZBAY

ENGLISH LANGUAGE TEACHING

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Supervisor: Prof. Dr. Arda ARIKAN

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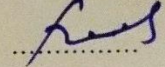
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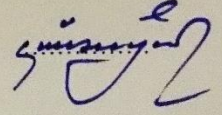
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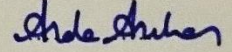
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YÜKSEK LİSANS TEZİNİN ADI:

THE USE OF MULTIPLE INTELLIGENCES IN TURKISH EFL TEXTBOOKS

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<div align="right">RAMAZAN ÖZBAY</div>

ÖZET

ÇOKLU ZEKA TÜRLERİNİN TÜRKİYE'DEKİ
İNGİLİZCE DERS KİTAPLARINDA KULLANIMI

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Amerikan psikolog Howard Gardner'ın 1983 yılında Çoklu Zekâ Kuramı'nı (ÇZK) yayımlaması ile birlikte zekayı anlamak üzerine süregelen tartışmalar yeni bir soluk kazanmış oldu. Zekanın genellemelerle sınırlandırılabildiğini iddia eden üniteryen görüşün desteklendiği geleneksel yaklaşımların aksine Gardner, zekanın çoklu yönleri olduğunu savunduğu plüralist yaklaşımı desteklemiştir. Kuramı ile Gardner, Sözel – Dilsel (SDZ), Görsel – Mekansal (GMZ), Mantıksal – Matematiksel (MMZ), Bedensel – Kinstetik (BKZ), Müziksel – Ritmik (MRZ), İçsel – Kişiye dönük (İKZ), Sosyal – Kişiler arası (SKZ), Doğa (DZ) adı altında bir grup zekâ türünün varlığını öne sürmüştür. ÇZK her ne kadar psikoloji bilimini hedefleyerek sunulmuş olsa da farklı disiplinlerde de ön plana çıkmayı başarmıştır. Eğitim bilimleri açısından bakıldığında ise çeşitli eğitimcilerin bu kuramın eğitimsel hedefler doğrultusunda entegre edilmesi hususunda girişimleri olduğu görülmektedir. Öğretim ve öğrenimde esası destek materyali olan ders kitaplarının ise eğitimde önemli bir role sahip olduğu düşünülmektedir. Bu nedenle, ÇZK'nin ders kitaplarında uygulanmasını incelemek üzere çeşitli çalışmalar yapılmıştır. Türkiye'de ÇZK'nin İngilizce ders kitaplarına entegre edilmesi 2006 yılında Milli Eğitim Bakanlığı tarafından resmen uygulamaya geçirilmiştir.

Bu tez çalışmasında ÇZK'nin Türkiye'deki devlet ilkokullarında 2, 3, 4 ve ortaokullarında 5, 6, 7, 8 sınıflarda okutulan İngilizce ders kitaplarındaki kullanımını görmek amacıyla alternatif bir ders kitabı analizi yapılmıştır. Elde edilen sonuca göre en çok başvurulmuş olan zeka türü SDZ olmuştur ve bunu sırasıyla GMZ, MMZ, SKZ, İKZ, BKZ, DZ ve MRZ izlemiştir. İlkokul ve ortaokul sınıfları olarak iki grup birbiriyle kıyaslandığında ise baskın zeka türlerinin her iki grupta da sırasıyla SDZ, GMZ, MMZ, SKZ olduğu görülürken, İKZ, DZ, BKZ ve MRZ türleri sıralamasında ve elde edilen oranlar bakımından farklılıklar olduğu görülmüştür.

Anahtar Kelimeler: *Çoklu zeka kuramı, İngilizce ders kitapları, kitap analizi*

ABSTRACT

THE USE OF MULTIPLE INTELLIGENCES
IN TURKISH EFL TEXTBOOKS

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July 2019, 94 pages

With the promulgation of the Theory of Multiple Intelligences (MIT) in 1983 by the American psychologist Howard Gardner, concepts through understanding the aspects of intelligence has gained a new phase. Unlike the conventional approaches which supported unitarian views that considered intelligence as limited to some claimed generalizations, Gardner supported the pluralist view which argued for the existence of multiple facets of intelligence. With his theory, he suggested a set of intelligences labeled as Verbal – Linguistic (VLI), Spatial – Visual (SVI), Logical – Mathematical (LMI), Bodily Kinesthetic (BKI), Musical (MI), Intrapersonal (IAI), Interpersonal (IEI) and Naturalist (NI). Although his study was initially considered to be a contribution to psychology sciences, it also came into prominence in various disciplines as well. Regarding its position in educational sciences, several educators encouraged the integration of Gardner's theory in educational purposes. Textbooks as essential supplementary materials in teaching and learning, are considered to hold a significant role in education. Therefore, various studies were depicted to investigate the implementation of Multiple Intelligences (MIs) in the textbooks. In Turkey, MIT was officially decided to be integrated in English language (EFL) textbooks within the curriculum updates commenced in 2006 by the Ministry of National Education.

In this thesis study, an alternative textbook analysis was conducted to see the use of MIs in EFL textbooks used in Turkish state primary and secondary school grades from the 2nd to the 8th grades. According to the findings obtained, the predominant intelligence type was found to be VLI, and the following types were SVI, LMI, IEI, IAI, BKI, NI and MI. When the primary and secondary grades were grouped in two and compared, it was seen that while the predominant types for both groups were similarly VLI, SVI, LMI and IEI (in a descending way), differences were observed in the orders and ratios of IAI, NI, BKI and MI.

Keywords: *Multiple intelligences, EFL textbooks, textbook evaluation, Turkey*

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LIST OF ABBREVIATIONS

EFL: English as a Foreign Language

ELT: English Language Teaching

ESL: English as a Second Language

MIs: Multiple Intelligences

MIT: Multiple Intelligences Theory

VLI: Verbal – Linguistic Intelligence

LMI: Logical - Mathematical Intelligence

SVI: Spatial – Visual Intelligence

BKI: Bodily Kinesthetic Intelligence

MI: Musical Intelligence

IEI: Interpersonal Intelligence

IAI: Intrapersonal Intelligence

NI: Naturalist Intelligence

MoNE: Ministry of National Education

TPR: Total Physical Response

CHAPTER I

INTRODUCTION

1.1.   Introduction

Having spent over two centuries with several scholars' experiments, researches, debates, arguments in the attempts of exploring the boundaries and behaviors of intelligence, the American psychologist Howard Gardner brought a new insight in the world of science with the publication of "Multiple Intelligences Theory" (MIT) in 1983. In addition to its contributions in psychological studies, MIT also gained a significant role in the education world by inspiring educators to question the current domains and the possibilities of integrating Multiple Intelligences (MIs) in teaching.

Within the light of MIs firstly, students' individual differences and intelligence profiles began to be investigated, then the teaching materials were taken under the scope accordingly. Textbooks, as the indispensable supplementary materials for teaching and learning, also began to be analyzed. Several studies around the world have taken place to view the representation of MIs in textbooks so far. In this thesis study, in addition to previously presented researches, an alternative textbook investigation is presented within the frame of MIT.

First, the significance and purpose of the study is introduced. Then the thesis moves on giving background information about the works focused on intelligence and presents Gardner's theory. After depicting the details of each intelligence type, the thesis reviews the connection between the MIs and education, then touches the significance of coursebooks in language learning and teaching. Related studies in coursebook / textbook analyses in terms of MIs are followingly presented.

In the next chapters, methodological details such as explaining research instruments and tools are given. The thesis also introduces the selected EFL textbooks and presents a new compilation of checklists which were used in previously implemented researches to categorize the tasks into the related intelligence type. The results are determined as textbook-specific in tables. Findings and implications for the further studies are stated in conclusion.

1.2.   Significance and Purpose of the Study

Today, advancements in technology help people from different cultures and backgrounds to get connected with each other so easily, and we witness that English language is consolidating its current position as the dominant language used in the world. Countries are considerably paying attention to English language teaching (ELT). However, in Turkey, this issue is one of the most criticized subjects of national education due to the statistics showing that English competency is low in the country.

According to EF English Proficiency Index in 2017, Turkey is holding the 62nd position among 80 countries. To overcome this problem, various ideas and studies have been put forward, but not an exact solution has come up as applied by educators. Therefore, Ministry of National Education of Turkey (MoNE) carry out a continual improvement process on modifying and even renewing the ongoing teaching system. Several attempts have been made so far, such as enriching supplementary materials, introducing new curriculums, implementing teacher trainings etc. In 2005 the curriculum applied in ELT was taken under the scope seeking for the implementation of new methodological trends, and followingly MoNE in 2006 required MIs to be integrated into the EFL textbooks used in the state schools (Kırkgöz, 2010). Also, in 2012, 2nd and 3rd grades started to have English lessons in primary schools, which had been given only to 4th and 5th grades before. With the beginning of this regulation, new textbooks

were designed for these two grades, and it brought a question among educators whether the designed textbooks were suitable for meeting the expectations or not.

There are some studies conducted questioning the MIs profiles in the language textbooks / coursebooks; however, recently published EFL textbooks are still needed to be analyzed in terms of MIs. Hence, in this thesis, the purpose is to offer an alternative study for the good of national education by investigating the tasks given in seven different EFL textbooks which are officially assigned to be used not only in primary schools, but also in the secondary schools in Turkey. The core problem of this study is to analyze the tasks and find out the distribution of intelligence types over each grade's EFL textbook within the scope of Gardner's MIT.

1.3. Research Questions

Pertaining to the purpose of the study given above, the core aim of this thesis study is to find the use of MIs in the EFL textbooks which are implemented in Turkish state primary and secondary schools. Within this scope, the following questions are aimed to be answered:

1- How frequently are the MIs represented in the activities in the EFL textbooks used in Turkish primary and secondary education?

2- What are the predominant and least represented intelligence types in EFL textbooks used in Turkish state primary and secondary schools?

3- What are the similarities and differences in EFL textbooks in terms of two groups; primary and secondary education?

1.4.   Limitations of the Study

The limitation of this study is that the locally designed EFL textbooks which have been analyzed, are the ones which were used in the 2017-2018 education season only by the Turkish state primary and secondary schools for the grades 2, 3, 4, 5, 6, 7, 8. Also, only the main student books have been analyzed, but the workbooks are excluded since they are considered as optional supplementary materials. Regarding the intelligence types, only the given eight intelligences have been taken under the scope for evaluation; existential and moral intelligences are excluded as these two types have not been officially qualified as separate intelligence types yet.

Another limitation is the checklist which has been designed to define the classifications of the intelligence types over the activities taking place in the textbooks. Only some of the previously developed checklists prepared by Christison, 1996; Checkley, 1997; Berman, 1998; Botelho, 2003; Kırkgöz, 2010; Razmjoo and Jozaghi, 2010; Arikan, Soydan and İşler, 2014 have been used to design the new checklist and conduct the analysis.

CHAPTER II

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1. Concepts Through Intelligence

Intelligence is one of the most discussed subjects about human beings, and for over a century, several attempts have come up to understand it in depth.

In the 18th century, the first attempt came in a biological way from Franz Joseph Gall, a French neuroanatomist. He was carrying the curiosity of a link between humans' skull shapes and their mental characteristics, which later became the primary field of the study which he called "phrenology" (Gardner, 1983).

In the 19th century, the British polymath, Sir Francis Galton represented another recognized example for studies on mental aspects of humans. He was into this field from the eugenic view as he believed that mental ability could be passed down to offspring through heredity. He was instrumental in commencing the studies on individual differences (Gardner, 2011). The starting point for Galton was actually in 1865 due to his zeal in heredity studies like his cousin, Charles Darwin (Clayes, 2001), who became Galton's influencer by promulgating *Origin of Species* making him elude other fields he had been working on and particularly give rise to the aspects of human ability. Galton developed statistical methods to rank humans in terms of physical and intellectual capability associating such measures to each other (Gardner, 2011).

In the early 20th century, psychometric view on intelligence gained a remarkable deal among scientists and several instruments for testing intelligence were created. For example, the English psychologist Charles Spearman (1904), introduced "g" and "s" factors, which became the dominant view of intelligence in three-quarters of the century. He claimed that all

cognitive performances were related to one's level of general cognitive ability which he labeled as "g" representing the universal inborn ability affecting an individual's success in life, and "s" factor represented specific intellectual ability acquired from the environment and it varied depending on activities (Pal, Pal and Tourani, 2004). Spearman's work laid the foundations of a new work; in 1904, the Ministry of Education in France requested a test to identify schoolchildren's intelligence with the aim of finding out the ones who were in need of special educational interventions, and the French psychologists Alfred Binet, also today known as the father of the Intelligence Quotient (IQ) tests, with his colleague Theodore Simon developed the first intelligence test called "*Binet-Simon Scale*" in 1905. It was comprising 30 short tasks which included daily life problems, and the tasks were gradually becoming more challenging. However, depending on the results of the tests, mentally retarded children were being eliminated, and other children were being placed at proper grade levels instead (Gardner, 2011). In 1916, Lewis Terman tried using Binet's scale in the US for the school children in California. However, some norms which had been originally applied in France did not work well in the US. Hence, he created a new test called "Stanford-Binet Revision", which was an adaptation of some items from Binet's test, and Wilhelm Stern's formula of "*Intelligence Quotient*". In the following years, such tests began to be widely used in different disciplines even in the army. During the World War I, draftees were classified according to Yerkes's Alpha and Beta tests. Alpha tests were verbal ones prepared for those who could read in English and Beta tests were given to illiterate ones, and the combination of the tests was producing the total IQ scores. (Thorndike and Thorndike-Christ, 2010). In 1920's, Charles Spearman this time investigated using "factor analysis" to see the relationship among the experimental intelligence tests, then he suggested that any individual succeeding well in some intelligence tests, could also succeed in some intellectual tasks including spatial, vocabulary and mathematical abilities.

Alongside the reputation of such tests, a wave of criticism was set off by some critics. An example to those critics can be credited to the American journalist Walter Lippmann (1922, as cited Gardner, 1999), who stated his concerns about test items' elusiveness and potential cultural biases pointing out the risks over a single way of assessment. On the other hand, the unitarian concepts upon intelligence was opposed by some critics. Thorndike (1920) was among those pluralist critics that he suggested intelligence could apply in different forms depending on the actual situation and context, and it could be categorized in three types; mechanical, social and abstract intelligences, all of which are mutually independent components. Since he was against measuring the intelligence without considering the background of an individual, he proposed four dimensions of intelligence for testing abstract intelligence; altitude (the difficulty and complexity of tasks), width (variety of tasks on a given difficulty, area (a function of altitude and width), speed (number of tasks one can complete in a given time). This approach of Thorndike also established the foundations of modern intelligence tests. Similar to Thorndike, Thurstone was another pluralist who rejected Spearman's general factor, claiming that there were primary mental abilities which could not be limited to only one factor. Hence, he announced that there were seven primary abilities of intelligence; "word fluency, verbal comprehension, spatial visualization, number facility, associative memory, reasoning, perceptual speed"(Thurstone, 1938). In 1938, while the studies and arguments were focusing on the cognitive side of the intelligence, as Thorndike had similarly done, David Wechsler was another critic who addressed the non-cognitive aspects of intelligence, too. He defined intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment" (Weschler, 1958, p.7).

On the other hand, in 1950's the British educational psychologist, Philip Vernon (1950) brought a new concept in discussion with his "Hierarchical Theory" by which he modified

Spearman's two-factor theory in a cognitive structure with the combination of Thurstone's multiple-factor theory. He considered intelligence as an orientation of four levels of abilities. He stated that the highest level was of Spearman's "general factor", the sublevel was consisted of major group factors which were verbal-numerical-educational factor and practical-mechanical-spatial-physical factor. The following level was comprised of minor group factors which were the subdivisions of major group factors. The last level was Spearman's "specific factor." Furthermore, Vernon (1964; cited in Williams and Burden, 1997) also supported the other pluralists arguing that intelligence could not be considered in a unitary concept. Hence, he separated it in three domains. The first domain was "Intelligence A" and it represented the inborn ability which was believed to be transferred genetically. It was at the same time an approval of Spearman's general factor, but for Vernon it was not possible to measure it since individuals had different genetic stories and they were affected in environment in dissimilar ways. The other domain was "Intelligence B" which represented the ability that an individual showed in daily life while learning, thinking and solving a problem. He stated that it was an "interplay between genetic potentiality and environmental stimulation" (1979, p. 10, 20). In addition to these two domains he added the third one, "Intelligence C" which was what IQ tests measured.

More theories continued to be put forward by various scholars in the same period. For example, the British and American psychologist Raymond Cattell (as cited Jensen, 1998) asserted that Spearman's "g" is rather a combination of two general factors. He termed these two factors in his theory as "fluid intelligence (Gf) and crystallized intelligence (Gc)." Gf was an innate ability which reflected reasoning skills of an individual upon solving a problem which had not been experienced before. On the other hand, Gc was a consolidated knowledge acquired along with the experiences reflecting skills and information such as vocabulary and numerical ability, social skills etc. in a culture-specific setting. Furthermore, the American

psychologist Joy Paul Guilford (as cited Jensen, 1998) proposed "the structure of intellect model" (SOI Model). With the SOI model, Guilford expressed that there were three dimensions of ability, each with various forms. One of the dimensions was termed as "content" and it included visual, auditory, symbolic, semantic, and behavioral abilities. The other dimension was "products" and units, classes, relations, systems, transformations, implications were in this group. The third one was "operations" which comprised cognition, memory, divergent production, convergent production, evaluation. In 1983, the American psychologist Howard Gardner promulgated his "theory of multiple intelligences."

2.2. Multiple Intelligences Theory

In 1983, the American psychologist Howard Gardner brought a new insight announcing his theory of MIT which made him one of the most remarkable flag holders in the field of intelligence studies.

As he mentions (2011), the fundamentals of the MIT go back to 1979 in Harvard University, when he was assigned in a project on human potential "to write a book chronicling what had been established about human cognition through discoveries in the biological and behavioral sciences" (Gardner, 2011. p. 10). He took a part in the project with a group of specialized scholars and the research led to the birth of the MIT in his book "Frames of Mind" which was introduced in 1983.

In Frames of Mind, he supported the pluralists, such as Thurstone and Guilford as they argued for the existence of various factors and components of intelligence; however, instead of depicting the low correlations in groups of tests, Gardner approached the intelligence from the neurological, evolutionary and cross-cultural evidences. On the other hand, he was against the hierarchical setting of the factors which were proposed by the scholars, such as Catell and Vernon. He was a supporter of Thurstone at this point again, because he believed that there

would be a heterarchical structure among the factors of intelligence, but not a hierarchical one. He addressed the individuality in a comprehensive way asserting that individuals were different in abilities and each human being had different intelligence in different areas. Hence, he rejected the regie of traditional IQ measurements, and suggested that intelligence should not be measured only from one aspect.

He defined intelligence as "a biopsychological potential of intellectual faculties that is, the ability to solve problems, or to fashion products, that are valued in one or more cultural or community settings" (1983, p.81). In Intelligence Reframed (1999) he refined the definition of intelligence as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (p. 33). Within the same concept, without productivity, IQ was not enough to represent intelligence. Hence, Gardner (1983) proposed seven intelligence types named as "verbal-linguistic, logical-mathematical, spatial-visual, bodily-kinesthetic, musical, interpersonal and intrapersonal intelligences," and finally, in 1999 "naturalist intelligence" was added as the last type.

Since the birth of MIT, Gardner has published several books which have gained a high interest and reputation among the other scholars. Each type has been taken under the scope by researchers in various disciplines and many studies have been conducted based on his theory.

McKenzie (2002), categorizes Gardner's MIT in three domains; analytical, introspective and interactive. Analytical domains contain logical, musical and naturalist intelligences; introspective ones are verbal, interpersonal and kinesthetic intelligences; interactive domains are intrapersonal, visual and existential. He suggests that the interaction between the intelligences can be understood through these three domains.

Weinreich-Haste (1985) states that while defining the intelligence types, if Gardner hadn't marked each selection as "intelligence," the perception of people would have been

different. They would have perceived these categories as talents or aptitudes basically. In order to define the difference between intelligence and skills, talents, aptitudes or such, Gardner (1983) proposes eight criteria that each intelligence must meet; then, it can be considered as a full-fledged intelligence according to the following criteria (Armstrong, 2009, p.8);

- o Potential isolation by brain damage.

- o The existence of savants, prodigies, and other exceptional individuals.

- o A distinctive developmental history and a definable set of expert "end-state" performances.

- o An evolutionary history and evolutionary plausibility.

- o Support from psychometric findings.

- o Support from experimental psychological tasks.

- o An identifiable core operation or set of operations.

- o Susceptibility to encoding in a symbol system.

Only those which have satisfied all or most of the criteria mentioned above are selected as genuine intelligences (Gardner, 1983).

Also, Gardner (1983) mentions about two prerequisites in MIs; the first is that a human intellectual competence must necessitate a set of skills of problem solving against the genuine obstacles that the person encounters to create an effective product. The second one is the capability for finding or creating problems for the acquisition of the new knowledge. "These prerequisites are way of ensuring that a human intelligence must be genuinely useful and important, at least in certain cultural setting" (Gardner, 2011, p. 65).

2.3. Key Points and Principles of Multiple Intelligences Theory

Gardner's claim over intelligence has been widely accepted and become subject to core of many studies. In addition to theoretical definitions, he points out the principles of MIT. The following key points and prominent principles of MIs based on some works (Gardner 1983; Teele 2000; Rogers 2011; Armstrong 2009, p. 15, 16, 27) are possible to be suggested in the following way:

- o Everyone has the capacity of having all the intelligences.

- o Everyone can develop all the intelligences to a rational level of competence if supported, instructed and encouraged adequately.

- o No intelligence exists by itself. Intelligences are in interaction with each other and work together in complex ways.

- o One can be intelligent within in each category. There are varieties of attributes for individuals to perform their gifts both within and between intelligences.

- o Intelligence can develop upon biological endowment, personal life history – experiences, cultural and historical background.

- o Intelligences are multiple; not singular.

- o Everyone is a unique blend of dynamic intelligences.

- o Intelligences vary regarding their development, both within and among individuals.

- o All intelligences are dynamic.

- o MI can be identified and described.

- o Everyone deserves opportunities to recognize and develop the multiplicity of their intelligences.

- o The use of one intelligence can enhance another intelligence.

- o The density and dispersion of personal background are critical to knowledge, beliefs and skills in all intelligences.

    o   All intelligences provide alternative resources and potential capacities for more human development, regardless of age or circumstance.

    o   A pure intelligence is rarely seen.

    o   Developmental theory applies to the MIT.

    o   Any list of intelligences is subject to change as we learn more about MIs.

2.4. The Eight Intelligences

As mentioned before, Gardner (1983) points out the potential of each human being's having different intelligence in different areas. Therefore, he believes that it is vital to interpret the right tools for each individual, and accordingly intelligences could be separated in different areas. In this respect, he suggests a division of intelligences which initially included seven types, and gained the additional one which is the eighth type mentioned below:

1. Verbal – Linguistic Intelligence
2. Logical - Mathematical Intelligence
3. Spatial - Visual Intelligence
4. Bodily – Kinesthetic Intelligence
5. Musical Intelligence
6. Interpersonal Intelligence
7. Intrapersonal Intelligence
8. Naturalist Intelligence

In Intelligence Reframed (1999), although Gardner implied about the possibility of 3 new types which are naturalist, spiritual and existential intelligences, later he left spiritual and existential intelligences to be investigated furtherly by researchers. Thus, "Naturalist Intelligence" became the 8th type of intelligence. As given before, Gardner states that each individual has different intelligence types associating in different ways forming what he calls the "intelligence profile" (1993, p.7). Thomas Armstrong (1999) proposes memory tags for these intelligence profiles as follows:

o	Verbal – Linguistic Intelligence:	Word smart
o	Logical – Mathematical Intelligence:	Number, reasoning smart
o	Spatial – Visual Intelligence:	Picture smart
o	Bodily – Kinesthetic Intelligence:	Body smart
o	Musical Intelligence:	Music smart
o	Interpersonal Intelligence:	People smart
o	Intrapersonal Intelligence:	Self-smart
o	Naturalist Intelligence:	Nature smart

Before moving to features of each profile, Gardner's (2011) statement should be remembered; "It becomes necessary to say, once and for all, that there is not, and there can never be, a single irrefutable and universally accepted list of human intelligences" (p. 64).

2.4.1. Verbal / Linguistic Intelligence (VLI)

VLI is the very first intelligence type which Gardner refers to in Frames of Mind. It is "the ability to use words effectively both orally and in writing" (Christison, 1996, p.11). It has reading, listening, writing, speaking in its circle, which are for understanding and using words to communicate with others (Nardi, 2001).

Gardner (2006) emphasizes that linguistic intelligence is activated during the communication not only in verbal way, but also in situations that individuals decode the written texts via visual information. For example, deaf people need syntactically arranged sets of signs which they can see or feel to communicate. Therefore, one's only encountering the sounds of language is not the limit for linguistic intelligence. It can cover the competence in the areas of syntax, phonology, semantics and pragmatics, which makes it "the most widely and most democratically shared across the human species" (Gardner, 2011, p. 82).

It includes skills such as remembering information, convincing others for help, and talking about language itself, using words to make meaningful production. Writing letters, stories, telling jokes, reading are also some activities of this group (Oliveira, 2009).

Lazear (2004), suggests that any form working with the language, such as reading something, speaking, talking, processing what is heard, making a speech are considered as a VLI involving activity.

Also, Gardner (2011) claims that apart from the average use of language, there are some other aspects of linguistic knowledge which are important in human society, but four of them are superior to the others. The first one is rhetorical aspect of language which is for convincing others over an idea or a fact; the second one is mnemonic potential of language which is for helping one remember information; the third one is its role in explanation which is for helping one obtain and teach new information via spoken or written forms; and the final one is language potential to explain its own activity which is for making metalinguistic analysis while describing language itself.

Linguistic competence tests, such as TOEFL (Test of English as a Foreign Language), GRE (Graduate Record Examination), IELTS (International English Language Testing System) focus the ability of the exam takers' use of language; from which one can actually think that such tests are used as instruments for testing the level of VLI partially. However, Gardner (1983) argues that VL intelligence is much more than what can be measured on a test.

According to Gardner (1983), Laughlin (1999), Nardi (2001) people who have a high level of VLI, also known as "word smart people," have;

o capacity to follow and occasionally skip the rules of grammar.

- o   sensitivity to the meaning of the words; to the sounds, rhythms, inflections and meters of words; to different functions of the language - its potential to excite, convince, stimulate, convey information, please.

- o   ability to effectively manipulate language to express oneself rhetorically or poetically; understand irony, metaphor, and puns; memorize speeches and texts; speak extemporaneously; tell stories; write creatively; learn a foreign language; listen, read, speak, write effectively; comprehend, paraphrase, interpret and remember what has been said and read.

Poets, authors, politicians, journalists, reporters, public speakers, lawyers, talk-show hosts can be given as example for VLI intelligent people.

2.4.2. Logical-Mathematical Intelligence (LMI)

Just like the VLI, LMI is the other very first type that Gardner (1983) proposed initially in MIT. He suggests that in terms of his criteria for an intelligence, while syntax and phonology stand close to the core of VLI, semantics and pragmatics contain inputs from LMI as well. Also, according to his analysis, only VLI and LMI have been valued and tested in modern secular schools; it is useful to think of that language-logic combination as "academic" or "scholarly intelligence" (Davis, Christodoulou, Seider, Gardner, 2011, p. 485). The connection between LMI is not limited with VLI only. While supporting Piaget for his approach in logical-mathematical thought in terms of developing in one domain, Gardner (2011) claims that Piaget mistakenly assumed that LMI thought is the element that holds together all cognition and pertains to other intelligence types as well.

This intelligence type is related to the ability; to set reasoning between actions, objects and ideas (Nardi, 2001) deductively or inductively; to recognize and manipulate abstract patterns and relationships (White et al., 1995, p. 42); to analyze problems, detect patterns,

perform mathematical calculations, show scientific reasoning and deduction (Gardner, 1999).
For Armstrong (2009), where LMI is activated is the moments when the individual makes
categorization, classification, inference, generalization, calculation, and hypothesis testing.

LMI intelligent individuals (Gardner, 1983, 1999; Laughlin, 1999; Nardi, 2001;
Mendel, 2003, p 48);

- o have logical competence to solve problems thinking mathematically.

- o are good at categorization, inference, generalization, calculations, order and
  sequence, developing hypothesis, hypothesis-testing and complex activities, such
  as research methods, computer programming.

- o enjoy solving problems with numbers and figures.

- o have competence to formulate questions and problems rapidly.

- o demonstrate complex reasoning and understanding towards abstract situations and
  relationships.

- o pay attention to logical patterns and relations, wording, functions, and other related
  abstractions.

Physicists, mathematicians, engineers, researchers, astronomers, economists, chemists,
programmers, scientists, detectives are some examples to those having a high level of LMI.

2.4.3. Spatial - Visual Intelligence (SVI)

Gardner (2011) explains this intelligence type as "the capacity to perceive the visual
world accurately, to perform transformations and modifications upon one's initial perceptions,
and to be able to re-create aspects of one's visual experience, even in the absence of relevant
physical stimuli" (p. 182). According to Armstrong (2009) it is "the ability to perceive the
visual-spatial world accurately and to perform transformations upon those perceptions," and

he adds that SVI contains "sensitivity to colour, line shape, form, space, and the relationships that exist between these elements; includes the capacity to visualize, to graphically represent visual or spatial ideas, and to orient oneself appropriately in a spatial matrix" (p. 7). Guignon (1998) suggests that it is the ability of thinking in pictures and working with objects effectively.

SVI is not only limited to visual domains in the real, concrete, external world, which is seen with physical eyes, but also in the deep recess of our imagination where we see with our mind's eyes. It can even get activated in blind individuals (Gardner, 2011). Concluding her study over researching blind children's spatial abilities, Landau (as cited Gardner, 2011, p. 196) comes up with a suggestion that "spatial representational systems are equally accessible to visual or to tactile experience; and there is not necessarily a privileged relationship between visual input and spatial intelligence."

SVI intelligent people (Gardner 1983, p.176; Laughlin, 1999; Armstrong, 2009);

- o have the ability to recognize instances of the same element; transform or to recognize a transformation of one element into another; graphically represent visual and spatial ideas; to move and operate well with a good sense of direction; recognize faces, places, objects, shapes; find missing objects through the use of visual recall; notice the visual changes and arrangements on something; think in images and pictures.

- o have the capacity to bring a mental imagery up to transform that imagery; produce a graphic likeness of spatial information; get more from pictures than words while reading; see solutions for the problems; read maps, charts, graphs easier and quicker than an average person.

- o   are good at imagining in vivid detail; reading maps, charts, and diagrams easily; art activities; finding way and navigation; arranging and decoding; building three-dimensional constructions.

- o   enjoy painting, drawing, doodling, doing puzzles, mazes, visual presentations and demonstrations.

In addition to prominent features of SVI, Gardner (2011) also points out a detail that every individual may not demonstrate the same competence, so these abilities are not identical. For example, a person may have little ability to transform the abstract world into drawing or imagining. He also suggests that the SVI is an amalgam of abilities which is likely to prompt an individual achieve success in the spatial domain.

Designers, sailors, navigators, cartographers, artists, sculptures, painters, photographers, decorators, pilots, surgeons, graphic artists, architects, are accepted to have highly developed SVI.

2.4.4. Musical Intelligence (MI)

Gardner (2011) defines musical intelligence as "the abilities of individuals to discern meaning and importance in sets of pitches rhythmically arranged and also to produce such metrically arranged pitch sequences as a means of communicating with other individuals" (p. 103). According to Saricaoglu and Arikan (2009) musical intelligence "entails the ability to create, communicate, and understand meanings made out of sound" (p. 111).

The relationship between verbal-linguistic and musical intelligences has been one of the most discussed issues. Demirezen (2009) suggests that when learning intonation in foreign language education, musical intelligence is activated and the unity of pitch, stress and juncture makes it difficult to achieve. Therefore, Pourfeiz (2014) claims that people endowed with a

high level of musical intelligence perform better pronunciation skills in the target foreign language. On the other hand, Gardner (2011) considers both music and language separate intellectual competences which are not dependent upon physical objects in the world; and he points out that via exploration and exploitation of the oral – aural channel it is possible to elaborate these competences to a significant degree. According to Richards (1993), while rhythmic chanting can help the development of auditory sequence abilities, singing can help the discrimination skills. Both activities include integration of letter sounds syllabification and pronunciation of words. Music is also seen as a contributor to interpersonal skills. Singing with others, for instance, is a social activity which can develop social bonds and build a sense of community by participation (Handy, 1996).

Individuals with a high degree of MI (Gardner, 1983; Christison, 1996; Laughlin, 1999; Nardi, 2001; Armstrong, 2009);

o have the ability to understand and identify the patterns of the sound; to think in music; express feelings via music; appreciate the forms of musical expressiveness; recognize simple songs and varying speed, tempo and rhythm in simple melodies; produce and appreciate rhythm, pitch, and timbre; identify the tunes and sense the missing or distorting tune; read musical notations and play simultaneously; memorize pieces and play in an improvised way; remember and reproduce melodies easily; compose novel pieces mentally.

o enjoy hearing music and environmental sounds while learning; playing with sounds; playing an instrument; responding to music kinesthetically; learning new information about music; trying new compositions and beats; criticizing and commenting about the pieces; interpreting the message hidden in the piece.

Regarding the critics arguing that music is rather a talent, but not an intelligence, Gardner (Gardner and Checkley, 1997) holds Mozart up as an example for a music smart one. Without a doubt is believed to have had a great intelligence to lead his talents. Gardner does not reject the arguments that the musical intelligence, like the other intelligence types, can show development in time; however, he is against the idea that it is totally a talent or an ability which is not associated with intelligence. Specific to musical intelligence; Berman (1998) suggests that in order to develop musical intelligence, auditory functions are necessary in relation to pitch and tone; however, for the knowledge of rhythm, they are not required (Ahanbor and Sadighi, 2014).

Musicians, composers, vocalists, instrumentalists, instrument makers, disk jockeys, dancers are some of the standing examples for music smart people.

2.4.5. Bodily / Kinesthetic Intelligence (BKI)

Bodily / kinesthetic intelligence is "the ability to solve problems or to fashion products using one's whole body or parts of the body" (Gardner, 1993, p.9). There are two core components of BKI which are consisted of an individual's ability to control his/her bodily motions, and to handle objects skillfully. These two capacities are linked with brain functioning, and like the other intelligence types, each ability may function separately or in concert (Gardner, 2004).

According to Shearer (2004), BKI is the ability to think in movements and to use the body in skilled and complicated ways. Sense of timing with the coordination of the body movement or / with the use of hands to manipulate the objects is what BKI smart individuals possess.

Physical skills, such as coordination, balance, dexterity, strength, flexibility, and speed, as well as proprioceptive, tactile, and haptic capacities are in the frame of BKI (Armstrong, 2009, p.7). Movement is the basic term which can be associated with BKI. Gardner (2011) expresses that movements can be separated into two types which are fine motor skills and gross motor skills. Gross motor skills are of athletic skills, such as the ability to move the whole body for physical activities which can include swift, dynamic movements, balance, coordination in sports especially. Fine motor skills are most associated with manual dexterity which concerns the ability to use hands skillfully and precisely to achieve the aimed movement.

According to Gardner (1983); Armstrong (1999); Laughlin (1999); Shearer (2004) some of the characteristics of BK intelligence are that BKI smart people ;

o   perform and improve physical activities with a well-coordinated of mind and body.

o   obtain knowledge through direct bodily movements, such as touching and doing it.

o   remember what happened rather than what was said.

o   use their bodies for expressive and goal-oriented aims skillfully.

o   enjoy activities which involve movements in a concrete learning atmosphere, such as participating field trips, model building, performing in a role play, doing sports and exercises, playing games which include mind-body coordination skills, etc.

o   have a good use of motor skills so they are skillful at hand crafts, such as drawing, sewing, shaping clays, painting, woodworks and similar DIY (do it yourself) works.

o   have tendency to observe and find out how things work.

o   have difficulty to remain still for a long period of time since they will want to move.

It is believed that athletes, mimes, actors, dancers, crafts-people, sculptors, mechanics, surgeons (Armstrong, 1999), ergonomists, demonstrators, divers, soldiers, fire-fighters,

osteopaths, fishermen, drivers, gardeners, chefs, acupuncturists, healers, adventurers (Gardner, 1983) are those who have high degree of BKI.

2.4.6. Interpersonal Intelligence (IEI)

When specifying the intelligences, Gardner (1983) makes a classification named as "personal intelligences" which are consisted of two types of intelligences. One of them is Interpersonal, and the other one is intrapersonal intelligence (IAI).

Gardner (2011) expresses the core capacity of IEI as "the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions" (p. 253). This ability varies in different ways from childhood till the adolescence. For example, while IEI constitutes the capacity of discriminating the individuals for a child who is trying to discover the different moods, for an adult it is the intelligence of reading the intentions and desires of others even they are hidden. At this point, it is believed that IEI has a direct connection with VLI since verbal communication is needed to act upon the knowledge read, and to influence the other individuals.

Botelho (2003) emphasizes that IEI is the prompter for a successful interaction with other individuals in various situations like participating in a teamwork, communicating with family and other social community. People who are endowed with IEI are believed to have the strength to influence and motivate the other people (Snider, 2001) with a good level of empathy performed.

Individuals possessing a high grade of IEI (Gardner, 1993; Laughlin, 1999; Armstrong 2009);

o   establish a good communication with others both verbally or nonverbally.

- o have ability to understand other people's feelings, behaviors; identify what others are trying to express by their facial expressions, voice and gestures.

- o enjoy taking active roles in organizations, team works, and enjoy affecting the group dynamics.

- o are skillful in empathy, mediation and negotiation; adapting behavior according to the atmosphere.

- o catch differences in interpersonal cues and respond successfully to those cues in pragmatic ways, such as observing a certain group dynamic and making the people in the group follow the action that he / she requires.

- o show tolerance to other people taking their differences into account, such as being from a different culture or a background.

People excelled with IEI have tendency to become religious leaders, political leaders, salespeople, psychologists, teachers, managers, coaches, directors, talk show moderators.

2.4.7. Intrapersonal Intelligence (IAI)

It is the second variety of personal intelligences which is based on the awareness of the internal aspects of a person; the capacity to understand oneself; access to one's own feelings, desires, fears, strengths, weaknesses, moods, intentions; and ability to make discriminations between these aspects and use them to understand and regulate one's own behavior (Gardner, 1993, 1999).

Connecting what is learnt to personal life is the main characteristic of IAI smart people. Within the same line, Rosnow et al., (1994) consider IAI as "cognate faculties" (p. 94) which we activate when we get curious about something or turn our attention inward for understanding ourselves. However, Gardner (1985) claims that IAI is also turning outward, when we learn from others and interiorize what is learnt.

Laughlin (1999) propounds that IAI and IEI are interdependent due to the fact that they both are formed by heredity, environment and experiences. According to Laughlin (1999), Shearer (2004), Gardner, (2011), Armstrong (2009) self-smart people;

o   have the capacity for self-reflection, self-awareness, and self-consciousness.

o   show a sense of independence, strong will and self-direction.

o   are aware of their own states realistically.

o   perform self-examination.

o   do not need to be assisted since they are self-sufficient.

o   prefer working alone rather than working with others.

o   are endowed with a good self-esteem.

o   have ability to learn from their mistakes and achievements in life.

o   can handle and solve internal issues easily.

o   find approaches and ways to share their feelings and thoughts.

o   enjoy the feeling of ego and personal skills and self-actualization.

o   have tendency to seek and observe inner experiences.

o   develop insights through the complexity of others and their own selves.

Since they are able to do self-examination and discover intrapersonal feelings, novel writers, therapists can be given as example for the IAI smart individuals (Gardner, 2004). Sages, philosophers, psychologists, teachers can also be given as more examples for IAI smart people.

2.4.8. Naturalist Intelligence (NI)

In addition to 7 intelligence types, in 1994 Gardner began to mention about the potential of a new candidate type to be the eighth one which was naturalist intelligence (NI). After

having several claims and debates regarding the validity of this type, in 1999 Gardner officially promulgated it with a full description to the array of seven intelligences.

Gardner (1999) describes NI as "the ability to demonstrate expertise in the recognition and classification of the numerous species – the flora and the fauna – of his or her environment (p.48). He also expresses that in many cultures the term naturalist has a value since they can not only recognize and see the difference between the nature beings (animals, plants, rocks, weather conditions etc.), but also categorize new or unfamiliar organisms. While a naturalist can be the person who can apply folk taxonomies of that belonged culture; it can be a person who carries the formal specifications which make him / her literally a biologist.

People who excel developed NI (Gardner, 1999; Armstrong, 2009);

o   appreciate and understand the natural world.

o   are able to discern the colours, sounds, smells, shapes and tastes of natural patterns.

o   can identify and classify the creatures in nature, variations of weather conditions.

o   show interest in observing the nature, recognizing the features of living organisms.

o   show sensitivity to natural formations, such as clouds, volcanoes, earthquakes etc.

o   enjoy talking about animals, natural facts, geography ; joining nature projects.

o   like field trips in nature, to the zoo, or to a natural history museum

o   pay attention to organizations dealing with the good of the planet, such as saving the habitats of animals, protecting the ecology.

o   feel better and relax when being in nature rather than artificial environment.

o   are interested in the behaviors of animals.

People, such as biologists, hunters, ranchers, farmers, gardeners, veterinarians, environmentalists, campers, climbers, adventurers, geologists are accepted to be strong in the naturalist intelligence.

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In addition to given eight intelligence types, as mentioned earlier, Gardner (1999) scrutinized Existential Intelligence (EI) as another potential intelligence type to be counted. Gardner (1999) defines as "the capacity to locate oneself with respect to the furthest reaches of the cosmos, and to the most existential features of the human condition, the significance of life, the meaning of death." Mahatma Gandhi, Albert Einstein are considered to be some examples who are strong with EI. According to him, capacity to question for deeper about human existence is what EI refers to; however, he suggests that more verification and validation for the applicability of EI is a need to be studied on. Hence, here only eight intelligences are taken in the scope of the research.

2.5. Multiple Intelligences Theory in Education

It is possible to say that MIT was born as a reaction to the traditional concepts upon human intelligence and Gardner's intention was to serve his work in the psychology world; however, MIs became a highly reputable theory in other disciplines, such as business and education fields as well.

Following Gardner's claim of MIT in *Frames of Mind* (1983), the education world showed great interest in his theory. Many people gained a new critical view on the applied educational practices in the light of MIT. Unlike the traditional concepts of intelligence, MIT led many educators to revise the common perspectives towards the understanding of intelligence. While students had been categorized as smart, judging from their linguistic and mathematical achievements, MIT refused limiting the intelligence only with these two areas and claimed that other areas of intelligence should be counted in as well. This critical view inspired many educators to depict several studies with the aim of providing students with a better learning environment in which they could receive a broader education through their different learning styles and abilities. Taking the differences between students' learning styles

and processes into account, education world began to actively participate in the development of new methods and techniques within the frame of MIT. Curriculum design and development, instructional practices, assessment methods have constituted the main proportion of the studies. Educators, such as Lazear (1992), Armstrong (1994, 2000, 2009), Campbell, Campbell and Dickinson (1996, 1999), McKenzie (2002) can be given as examples to those reformers suggesting MIT to be given place in education.

For example, Lazear (1992) points Gardner's (1983) "*sub intelligences*", as he calls "*capacities chart of multiple intelligences*", which is a set of categorizations of different core capacities or skills within each intelligence type (previously mentioned in intelligence types section). He defines these capacities as "*building blocks*" because he argues that in order to develop a student's capacity, the educators should be aware of the building blocks specific to each intelligence. He suggests integrating his capacities chart into curriculums.

Moreover, in his popular book, *"Multiple Intelligences in the Classroom,"* Armstrong (2009) presents Gardner's model with his own way of adaptation in the classroom. He touches the relationship between MIT and the curriculum design and development, teaching strategies, classroom management, cognitive skills of students, and its application and assessment. He also offers suitable activity methods specific to each intelligence type aiming to enrich teachers' repertoire of activities to apply in the classroom.

Similarly, Williams and Burden (1997) point out that due to the conservative approaches which were accepting the belief that intelligence was a fixed inborn-general ability allowing one to learn in a better way than others, children who were having difficulty to learn were diagnosed to be lacking intelligence. However, such views are not justifiable; therefore, they support Gardner's MIT for its claim that intelligence can develop and is considered from different perspectives.

Richards and Rodgers (2001) list a number of new roles of teachers familiarized with Gardner´s theory and have shown commitment to it. Such teachers "become curriculum developers, lesson designers and analysts, activity founders or inventors, and above all, orchestrators of a rich mix of multisensory activities within the realistic constraints of time, space, and resources of the classroom" (p.120). This method urges teachers to assess their lessons and make them fit every individual learner, keeping in mind his or her unique intelligence profile. This is considered inevitable to ensure learner´s full participation in the learning process and guarantee its maximum efficiency.

On the other hand, some studies have taken place regarding the perceptions of the educators. For example, Kornhaber, Fierros, and Veenema (2004) carried out an interview with the educators from 41 schools where MIT had been applied in teaching for the last three years. The four-fifths of the schools displayed development in standardized test scores. The researchers also proposed that transforming the school setting into a suitable MIT applicable environment was the key point which brought the success.

In spite of several critics, MIT has also gained a place among the educational approaches. Gardner and Moran (2006) claim that MIT is an approach and its advantages overweigh other approaches. According to their claim, since MIT is an intelligence-oriented approach and it asks researchers and educators to change their minds; it better explains several intelligent performances among children and adults taking their trainings, contextual, cultural backgrounds and innate inclinations.

2.6. Multiple Intelligences in EFL Textbooks

In education world, coursebooks are accepted to be the most used supplementary materials both in and out of the classroom in order to provide learners with a more reinforcing learning environment. Ur (1996, p.184) suggests seven advantages of a coursebook;

- o   it helps teachers and students know where they are and what's next.

- o   it serves as a syllabus; if followed properly its provides a flow of a good selection of language content.

- o   it helps teachers save time off preparing new tasks.

- o   it is the cheapest form of learning material comparing to those, such as kits, sets of photocopied papers etc.

- o   the components of it are together and it is easy to carry around.

- o   it guides and supports unexperienced teachers.

- o   it promotes student autonomy since they can do revisions and check their own progress without a teacher guidance.

Nunan and Lamb (1998) claims that thanks to coursebooks, teachers are having more chance to focus on other learning points, such as checking students' progresses, building new materials and exercises for revisions. According to Botelho (2003) students are given opportunity to use coursebooks since they provide "effective language models and input" (p.48). Similarly, Viali (2008) states that "teachers turn to coursebooks for choice of content, for sequencing of activities as well as guidance for the assessment process" (p.16). Furthermore, it is not easy for teachers to design and develop their own materials due to lack of time or money, or even of creativity and ability (Oliveria, 2009).

However, some teachers use only the coursebooks as the dominant material rather than giving space for other materials. As argued by Palmberg (2002), many teachers choose to use only one coursebook as the basis for a language course and have their students go through the book throughout the course in a systematic way. They tend to use it without checking its reliance nor the students' requirements nor their needs (Oliveria, 2009). Therefore, teachers should examine and choose the most suitable materials to supply for their students. As Botelho (2003) suggests, teachers are to select texts carefully and more efficiently in the light of needs,

differences and styles of students. When looked from this point, creating an optimum teaching and learning environment which appeals to all learners' individual differences has always been a challenge for teachers. MIT in this respect, is widely accepted to have brought a new perception and source of contribution which has reshaped the traditional implementations in classrooms. Several educators, such as Michael Berman, Mary Ann Christison, Rolf Palmberg, Herbert Puchta and Mario Rinvolucri are some of the standing voices who proposed integration of MIT in EFL education.

For example, Christison (1996) express that by applying MIT in EFL/ESL, teachers can address the great diversity in learner, develop learner's intelligences and "create an individualized learning environment" (p. 10). In his books "A Multiple Intelligences Road to an ELT Classroom" (1998) and "ELT through Multiple Intelligences" (2001), Berman suggests various activities for EFL teachers which are specific to each intelligence type with illustrations and exercises. Similar publications began to arise in the same period because it helped teachers notice the power of MIT.

According to Snider (2001) MIT-related materials have the strong potential to improve foreign language instruction because theory engage learner's innate abilities (p. 6). Richard and Rodgers (2001) define MIT as a way that not only have been included in public instruction but also in teaching English and its application in teaching English is recent and new (p. 117).

With the beginning of studies executed on MIT, educators began to shape their classroom activities and examined to what extent their activities were catering Gardner's intelligence types. In addition to the classroom changes, the next common discussion was addressing the coursebooks whether they were built in accordance with MIT. The distribution of intelligence types in given coursebook tasks was under the spot of researchers as well. A

significant number of researches have also been carried out to view MIT in language coursebooks.

2.7. Related Studies

As mentioned before, MIT highlights the individual differences in terms of intelligence, which naturally plays an active role in how a learner approaches towards a new input. Hence, several investigations have been done to observe the students' intelligence profiles and accordingly "it has led to the development of new assessment methods; the formation of MIs based curriculum and instruction, as well as positive experiences and close connections with students and their parents" (Hoerr, 2000, p.8). Arikan and Tekir (2007) propose that when developing materials, a syllabus should not be regarded as the unique criteria; however, students' motivation should also be considered; therefore, teaching materials such as coursebooks are necessary to be investigated in order to understand to what extent they meet students' needs.

The distribution of the intelligences in the coursebooks has been a question mark for researchers around the world whether the coursebooks used in their countries are catering for MIs type adequately or not. To find this out, various investigations have taken place.

For example, one of the earliest studies was carried out by Palmberg (2002) with whom a group of student teachers taking EFL methodology course at a university in Finland analyzed an EFL coursebook to see the proportional distribution of the exercises in terms of MIs. It was one of the most frequently used coursebooks for low level students in Finland, and about 300 exercises were put under the scope. According to the results, 97% of the activities catered for VLI and the following ones were IAI (76%), IEI (25%), LMI (8%), BKI (5%), SVI (5%), NI (3%), MI (2%). In the analysis, existential intelligence was also in the list, but there was no exercise catering for it.

Similarly, another analysis was carried out by Snider (2001), who evaluated ten different German language coursebooks taken by the first-year college students. According to the results, 41 activities were found to include MIs and 30 of them were of VLI.

In coursebook evaluations, one of the most consulted study was published by Botelho (2003) who designed a checklist for the categorization of the activities within the frame of MIs. In the same study, she evaluated six different levels of English language textbooks used in Brazil. The purpose of the study was also to find out whether the participant ELT teachers knew about MIs and applied them. The results showed that ELT teachers knew and used MIs in their programs. Regarding the textbook analysis, the dominant intelligence types were both VLI and IAI with 100% of execution in each textbook. SVI was the following most used type with 908% of average, IEI was (76.07%), LMI (41.22%) and the other types were less than 10%.

Oliveira (2009) conducted a coursebook analysis which aimed to find the distribution of MIs applied in the activities of two different EFL/ESL coursebooks (one elementary and one intermediate level) used in Brazil. The researcher analyzed the first half of the elementary coursebook which corresponded to one semester period of units. According to the results obtained, the most applied intelligence type was VLI (100%), and, in a descending order, it was followed by IEI (75%), IAI (72.22%), SVI (58.33%), MI (16.66%), LMI (13.88%), BKI (2.70%), and NI (0%). 33 activities were analyzed from the intermediate level coursebook and the results showed that VLI and IAI were the most applied ones with 100% for both. The following intelligence types were IEI (81.81%), SVI (21.21%), LMI (18.18%), MI (9.09%), NI (6.06%), BKI (3.03%).

In order to investigate the occurrence of MIs in EFL textbooks used by primary and secondary state schools for the grades 4,5,6,7,8 in Turkey, Kırkgöz (2010) conducted a study

in which five textbooks were examined. The intelligence identification process was carried out according to the MIs checklist developed for the analysis by two raters; the author and a post-graduate research student. The results revealed that VLI and SVI had the biggest proportion of intelligence application over all the grades. The least applied type was NI which was found in only two of the grades, and no existential intelligence was observed.

Razmjoo and Jozaghi (2010) point out the significance of moving from teacher-centered classrooms to student-centered ones, therefore, they can be given examples to those suggesting coursebook analyses considering students' needs. In their study, a series of English language textbooks which began to be used more commonly in Iran, was evaluated. From randomly selected 8 units in each textbook, the most applied intelligence type was VLI with 72.57% occurrence. Other types followed VLI as in a descending order; VSI (47.15%), LMI (43.47%), MI (37.45), IEI (32.77%), BKI (24.41%), IAI (17.39%), NI (9.03). Existential intelligence was also evaluated in the study and it occurred with a frequency of 2.67%.

Another study in Iran took place by Taase (2012). Three locally designed textbooks for guidance schools (grades 1,2,3) were investigated through Botelho's (2003) checklist for MIs activity classifications. VLI was the most frequently applied one, and it was followed by SVI, LMI, IEI, IAI. There was no BKI, MI and NI observed in each textbook.

Schlumpergerova (2013) investigated five different EFL coursebooks used in Czechia. The results showed that VLI was the most applied type in each coursebook. The distribution of the intelligence types over the tasks of all the coursebooks were displayed as it follows; VLI (96.01%), IEI (34.05%), SVI (29.14%), LMI (23.62%), IAI (13.5%), MI (6.75%), BKI (4.29%).

In another study, Arikan, Soydan and Isler (2014) investigated two coursebooks used by the 4th and 5th graders in Turkish state schools. Among the 327 activities taking place in the

4th grade coursebook and 528 activities in 5th grade coursebook, VLI was found to be the most applied type. Another similarity between each coursebook was that natural intelligence was given the least place.

Al Omari, Batanieh and Smadi et al. (2015) conducted an evaluation to see to what extent MIs was taking place over each intelligence type in Jordanian EFL textbooks used by the 1st, 4th, 8th and 11th grades. The results showed that VLI were observed in 100% of the 845 activities. The least applied type was MI with 1.9%. The other types in a descending way after VLI was IAI (69%), SVI (50.8%), LMI (43.6%), BKI (38.8%), IEI (31.8%), NI (14.7%), MI (1.9%). In the study, also moral, existential and spiritual intelligences were searched, but there was no activity catering these types.

Rather than the English language textbooks, to investigate the distribution of the intelligence types in Arabic language textbooks in Jordan, Jado (2015) depicted an analysis over eight textbooks used by the grades from 1 to 4. The results showed that the dominant type was VLI over all the textbooks. Although there was no IA was noted in the second-grade textbooks, it was the second dominant type in other grades. The general score reached over all the grades was as follows; VLI (69.7%), SVI (7.6%), IAI (7.1%), IEI (4.8%), LMI (4.7 %), NI (2.6%), BKI (1.9%), MI (1.6%).

Another study which was carried out in Sultanate of Oman, Al Seyabi and A'Zaabi (2016) investigated both students' and the nationally applied EFL textbooks' intelligence profiles. Regarding the EFL textbooks which were locally designed for the 12th grade students, VLI was observed in all of the tasks. IEI followed it with 54.94% and it was followed by the other types as LMI (39.42%), IAI (19.09%), VSI (11.20%), NI (10%), BKI (0.83%) and MI (0%).

Within the context of curriculum implemented in Thailand, Wattanborwornwong and Klavinitchai (2016) contrasted locally designed English and Chinese language textbooks in terms of MIs distribution. In the study, VLI was excluded from the research and the results showed that SVI was the most catered type in both English and Chinese language textbooks. There were differences among the order of the other types, but the least applied type was NI.

An ESP based study was done by Safranj (2018) who investigated the MIT's integration in Business English classes in a university in Serbia by analyzing the coursebook used by the students. The results showed that VLI was the most catered type with 31.6%. The following intelligence types were LMI (24.37%), MI (13.54%), VSI (11.06%), IEI (10.72%), IAI (8.23%), BKI (0.45%).

Al-Mekhlafi (2018) depicted an analysis to view the MIs types catered in two different English language textbooks used by the 9th and 12th grade students in Yemen. According to the results, VLI has 100% of distribution in total. VSI was the next most applied type with 17.06%. The following types were LMI (14.51%), IEI (13.825), MI (107%), IAI (9.73%), NI (8.87%), BKI (8.53%). In the study, also spiritual / existential and moral intelligences were investigated. While spiritual / existential intelligence was observed in 0.51% of the tasks, moral intelligence had no view.

As seen from the number of various studies which have taken place in the recent years, MIT has attracted the interests in education world, and it has also created a significant impact on both foreign language curriculums and designing textbook materials.

CHAPTER III

METHODOLOGY

3.1. Introduction

In this chapter, the research methodology, materials, data collection instruments and data collection and analysis procedures which were applied to run the study are described.

3.2. Research Method

In this study the aim was to provide answers responding to the research questions given below.

1- How frequently are the MIs represented in the activities in the EFL textbooks used in Turkish primary and secondary education?
2- What are the predominant and least represented intelligence types in EFL textbooks used in Turkish state primary and secondary schools?
3- What are the similarities and differences in EFL textbooks in terms of two groups; primary and secondary education?

In order to find an answer to all these research questions, a quantitative research model was adopted. As the research materials, seven EFL textbooks were evaluated in terms of the occurrence of MIs in the activities taking place in each unit of the students' books. For the classification of the MIs over the activities, a checklist has been designed as the research instrument.

3.3. Research Materials

Seven EFL textbooks implemented in Turkish curriculum for the education year, 2017 –2018 for the state primary and secondary schools constitute the materials of this thesis study.

All the units taking place in each textbook has been used for the evaluation. The details of each textbooks are given below.

3.3.1. 2nd Grade Textbook (English 2 / İlkokul İngilizce 2)

In Turkish state primary schools, English education starts in the 2nd grade and English 2 is an A1 level of EFL textbook which was used in the education season of 2017 - 2018 in Turkish state primary schools for the 2nd grade students as a requirement of The Ministry of National Education (hereafter MoNE). It was designed by Yalçın, Genç, Orhon, Şahin (2017), a commission designated by MoNE and it is consisted of a student's book with the cut out pages at the end of it, workbook, teacher's book and a CD which contains the listening tracks. There are 10 units in the student's book and half of the units were studied in the first education term and the other half of the book was studied in the second term. This textbook is also the first textbook that the students meet English language in primary education. The level of the textbook is A1 according to Common European Framework of Reference (hereafter CEFR) (MoNE, 2017).

3.3.2. 3rd Grade Textbook (English 3 / İlkokul İngilizce 3)

The following and the second year of English education in Turkey is given to 3rd grade students of state primary schools and English 3 is the A1 level of EFL textbook which was used in the education season of 2017 - 2018 in Turkish state primary schools for the 3rd grade students as a requirement of MoNE and it was designed by Bilen (2017). In the pack, the student's book and the workbook are taking place in one book which also has a picture dictionary and cut out pages at the end of the book. The teacher's book and a CD which contains the listening tracks are separate. There are 10 units in the student's book and half of the units were studied in the first education term and the other half of the book was studied in the second term.

3.3.3. 4th Grade Textbook (English 4 / İlkokul İngilizce 4)

English 4 is another A1 level of EFL textbook which was implemented in the education season of 2017 – 2018 in Turkish state primary schools for the 4th grade students as a requirement of MoNE. It was designed by Barut (2017) (Pantera Publications). In the pack, the student's book and the workbook are taking place in one book which also has a picture dictionary and cut out pages at the end of the book. The teacher's book and a CD which contains the listening tracks are separate. There are 10 units in the student's book and half of the units were studied in the first education term and the other half of the book was studied in the second term.

In terms of the characteristics of the 2nd, 3rd and 4th grades' EFL textbooks, it is stated by MoNE (2017) that these textbooks basically focus on listening and speaking skills with the activities including total physical response (TPR), arts and crafts, and drama. It is also mentioned that very limited reading and writing skills are also given place in some of the activities.

3.3.4. 5th Grade Textbook (English 5 / Ortaokul İngilizce 5)

In Turkish education system, although the secondary school education starts with the 5th grade, the EFL textbook level is still A1. English 5 is the main EFL textbook used by the 5th grade students of Turkish state secondary schools. It was developed by Yalçın, Genç, Orhon, Şahin (2017), a commission designated by MoNE and used in the education season of 2017 – 2018. The student's book, workbook, teacher's book and a CD which contains the listening tracks are the components. Also, there are 10 units taking place in the textbook.

3.3.5. 6th Grade Textbook (English 6 / Ortaokul İngilizce 6)

English 6 is another A1 level of EFL textbook which was used in the education seasons of 2017 – 2018 in Turkish state secondary schools by the 6th grade students as a requirement

of MoNE. It was developed by Parlar and Şeker (2017) (Ada Publications). The student's book, workbook, teacher's book and a CD which contains the listening tracks are the components. There are 10 units in the textbook which are studied throughout the education year.

Regarding the characteristics of the 5th and 6th grade EFL textbooks, MoNE (2017) declare that in the 5th grade's EFL textbook, listening and speaking skills are emphasized same as the previous grades; however, unlike the "very limited" use in the previous grades, reading skill is given place as a "limited" use and writing skill is still same with "very limited" use. Regarding the 6th grade's EFL textbook, while the listening and speaking skills are emphasized in a regular way, both reading and writing skills are given limited place. Another difference is that unlike the primary school activities, 5th and 6th grades are not having TPR and arts & crafts activities. Drama and role plays are the main activity types.

3.3.6. 7th Grade Textbook (Secondary School English 7)

Secondary School English 7 is the first A2 level of EFL textbook used in the education seasons of 2017 – 2018 in Turkish state secondary schools by the 7th grade students as a requirement of MoNE. It was developed by Habiboğlu and Özbay (2017) (Pantera Publications). The student's book, workbook, teacher's book and a CD which contains the listening tracks are the components. There are 10 units in the textbook which are studied throughout the education year.

3.3.7. 8th Grade Textbook (Middle School Moonlight English Course 8)

Grade 8 is the last step of the secondary education in Turkish education system. Middle School Moonlight English Course 8 is another A2 level of EFL textbook which was used in the education seasons of 2017 – 2018 in Turkish state secondary schools by the 8th grade students as a requirement of MoNE, and it was developed by Kandilci (2017) (Tutku

Publications). The student's book, workbook, teacher's book and a CD which contains the listening tracks are the components. There are 10 units in the textbook which are studied throughout the education year.

MoNE (2017) state that both in the 7th and 8th grades, the focused skills are primarily listening and speaking; secondarily reading and writing. Unlike the previous grades' activity types, theme-based activities and strategies are emphasized in these two textbooks.

3.4. Research Instruments

3.4.1. The Checklist Used for the MIs Classifications in the Textbooks

In order to evaluate the MIs profiles over each grade's textbooks a checklist has been designed. For designing the checklist, Gardner's (1999) and Armstrong's (2009) opinions and descriptions were transformed into checklist items, and added into a new compilation of previously designed checklists (Christison, 1996; Checkley, 1997; Berman, 1998; Botelho, 2003; Kırkgöz 2010; Razmjoo and Jozaghi, 2010; Arikan, Soydan and İşler, 2014) with some samples taking place in the evaluated EFL textbooks in this study. For the validity of the checklist, the views of two EFL teachers working in Turkish state primary and secondary schools were taken, and the final form of the checklist was reviewed and approved by an expert, the supervisor of this thesis study, who has depicted several studies and published researches on MIT. The implemented compilation of checklists is given below.

o *VLI Activities:* Reading, speaking, listening, writing, spelling, word games, lectures, small and large group discussions, debates, translating, interviewing, using language in games, answering comprehension questions, completing worksheets, asking and answering questions, speeches, story-telling, journal keeping, memorizing, using word processors, note taking, giving presentation, writing or reading a poem, short story, short play, news article, writing a composition / an essay, yes/no questions.

- *VLI Activity Instructions:* Write, say, spell, ask, answer, listen, speak, talk, find the word, read, read and say, read and answer, listen and say, fill in the blank, describe, talk about, complete the sentence, choose the correct word, make a dialogue.

- *LMI Activities:* Guided discovery, problem solving, grammar practice, logic puzzles, calculations, critical thinking tasks, brainstorming, identifying main ideas, summarizing, determining cause and effect, data collecting, crossword, comparing, explaining by giving reasons, defending reasons, estimating, memory games/activities, understanding from context, sequencing, categorizing, classifying, error identifying, putting in an order, science demonstrations, finding the difference, showing relationship, games, numbering, number games, rating exercises, predicting.

- *LMI Activity Instructions*: Categorize, do the puzzle, put in correct order, choose true or false, make a list, compare, solve the puzzle, find the missing letter / word / part / object, odd one out, unscramble the words, follow, decode the secret message, choose the correct answer, explain why.

- *SVI Activities:* Visualizations, working with visuals, colors, pictures, graphs, videos, slide shows, using charts, grids, maps, posters, clusters, graphs, illustrations, photos, writing and speaking based on pictures, picture stories, illustrating stories, geometric figures, 3D models, painting, activating imagination, using mind maps, drawing, card games, watching someone or something, art activities, making image albums.

- *SVI Activity Instructions:* Look and do, do when you see, watch and do, match with the pictures, draw, colour, trace the lines, connect the dots and colour it, prepare a poster, find the differences between the pictures, pretend to be someone or something.

- *BKI Activities:* Creative movements, role play, pantomime, TPR, drama, hands-on activities, dancing, clapping when necessary, acting out, miming, craftworks, simulations, object coordination, classroom games, hanging, group or pair works including creative movement, find someone who, field trips, imitating.

- **BKI Activity Instructions:** Act it out, dramatize, do the actions, imitate, play a game, cut, practice, draw, paint, point, walk in the class and find, stand up, clap your hand when, raise your hands when.

- **MI Activities:** Singing, sound recognition, listening for a specific sound, listening to a song, chanting, humming, imitating sounds, sound differentiations, playing music, rhyming, music appreciation, instrument playing mimes, music games, listening for comprehension, tongue twisters, rhythm and intonation practice, writing song lyrics.

- **MI Activity Instructions:** Listen to the song, listen and repeat, listen to the chant, say the chant, sing a song, clap your hand you hear the sound.

- **IEI Activities:** Group works, pair works, dialogues, discussions, communicative tasks, conversations, role plays, board games, project works, making questionnaires, interviews, surveys, giving and receiving feedback, asking and answering, whole class works, peer sharing, peer editing, group / peer brainstorming, solving a problem as a team, using social skills, cooperative learning, teamwork games, intercultural awareness, presentations.

- **IEI Instructions:** Ask and answer, ask classmates, give instructions to your friends, discuss with your partner / group members, work in groups / pairs, share with your friend, make a dialogue with your friend/s, ask and fill the form, read the speech bubbles and match with the correct country flag.

- **IAI Activities:** Independent student work, journal keeping, self-evaluations, interest centers, narrating a story, what about you sections, individual works, personal experience related tasks, reflecting, self-paced projects, own feeling reflecting, talking about own personal history, expressing feelings and emotions.

- **IAI Instructions:** Talk / write about your, continue conversation in your own way, prepare a poster about your, explain about your, check your progress by rating the items in the list.

- o *NI Activities:* Classifying plants, weather conditions, animals, minerals, tasks about geographical items, such as seas, rivers, lakes, forests etc., animals, pets, seasons, weather conditions, environmental issues, natural sound recognition, wildlife, noticing natural items, nature projects, animal sound recognition, background sounds simulating natural world, use of pictures related to nature, animal games.

- o *NI Instructions:* Listen to the sounds of animals / nature, tell what's the weather like, talk about your favorite season / pet, listen to the animal sounds and match with the pictures, read the speech bubbles and match with the animals, write the months under the correct seasons, read the temperature for your city, do the questionnaire about animals, answer the questions and see how much you know about the environment, answer; what we should do to protect wildlife.

3.5.   Data Collection Procedure

In order to collect the target data, a compilation of the checklists was developed. As mentioned before, for designing the checklist, Gardner's (1999) and Armstrong's (2009) opinions and descriptions were transformed into checklist items and added into a new compilation of previously designed checklists cited above with some samples taking place in the evaluated EFL textbooks in this study. For the validity of the checklist, the views of two EFL teachers working in Turkish state primary and secondary schools were taken, and the final form of the checklist was reviewed and supported by an expert, the supervisor of this thesis study, who has several studies on MIT. The designated checklist was used by the researcher with the help of the EFL teachers to identify and classify the MIs profiles over the activities taking place in the EFL textbooks given in materials section.

Only the activities in students' textbooks were taken into the account, but the workbooks were excluded. The reason for doing this was to be analyzing only the core

activities in the basic textbooks rather than the optional items given in the workbooks, because as suggested by the teachers, the workbooks were especially used out of the classroom as the homework resource books. Another reason for excluding the workbooks is that activities in the workbooks might not be operated by the teachers, so they are usually left on students' initiative. In addition to workbooks, items such as quizzes or extra exercises taking place at the end of the books were taken out of the evaluation since they are regarded as optional activities according to the teachers. However, all the activity items apart from such optional parts were processed. Hence, only the activities in students' books were evaluated as they were operated by the teachers in accordance with the instructions given to teachers in teachers' books. In another saying, only the standard instructions given to the teachers were followed while classifying the intelligence types.

Furthermore, teachers' books were taken as the basis for the classification process as mentioned above. The reason for this was to see the inner criteria and purpose for the activities. Teachers run the textbooks' implementation in the class, but not the students on their own, so the instructions taking place in the teachers' books include the main and sub objectives designated for each activity. To illustrate, in a students' book, while only one activity instruction is written, it is exploited through multiple instructions for the teacher to run that activity. If the researcher followed only the students' book, the objectives of some activities would be missed and only the instruction-oriented classification would happen, and it would be dissatisfactory to transfer the right data into analysis.

When classifying the intelligence types, to surpass the encountered challenges which sometimes occurred, the expert view was taken for defining which intelligence types were catered in an activity. For example, the instruction "circle" is accepted to be in BKI catering activities since it involves body movement. However, as mentioned in literature review, Gardner (2011) suggests that physical movements are in two groups; fine and gross motor

skills. Fine motor skills are most associated with manual dexterity which concerns the ability to use hands "skillfully" and "precisely" to achieve the aimed movement. Depending on this suggestion, the instruction "circle" was accepted to cater BKI if it aimed to develop a performance of a skillful and precise hand use in activities as given in Appendix 1 which is imaged from an activity taking place in the 3rd grade EFL textbook. However, if the instruction did not aim a skillful and precise hand use as given in Appendix 2 (from the 8th grade EFL textbook), it was not considered to be a BKI catering activity.

Another significant point was the acceptance of a task's being in more than one group of classification. For example, the instruction "draw" is accepted in the group of SVI catering activities. However, since it involves the skillful hand use, it was also catered for BKI type as well.

Also, in order not to miss any significant data, the listening tracks were listened by the researcher so that deciding whether a listening track would cater for any other intelligence type or not became clear for an accurate designation. For example, depending only on the instructions, in an activity which required a music play, basically MI would be noted as the main intelligence type; however, when listened, NI type could be observed in some tracks. Another example is that, when listened to a music in a listening track, although the music was corresponding to MI, it was observed in some activities that it aimed students to notice the differences in pronunciations of some syllables of the words. This shows that such activities catered for both LMI and VLI. The reason for LMI is since the activity included trying for noticing the difference and activating creative thinking skills; and the reason for VLI is that the activity focused on a linguistic development of the students. Likewise, some activities asked students to practice listening and repeating the sentences with changed syllables. Although there was no music, due to sound recognition / sound differentiation feature, such activities were accepted to be catering for MI as well in addition to VLI and LMI (for the same

reason given above). Therefore, each listening track was listened in order to prevent a miss in classifications.

It is important to keep in mind that in this study, one activity does not mean only one task. An activity might be consisted of a single task or multiple tasks. Since a task is also an activity, when mentioning about the number of the activities in the analysis, it is the number of the tasks indeed.

Depending on the variations and solutions while designating the intelligence types into their categories, the lists were prepared showing the number of activities (tasks) for each unit in each textbook. The data taking place in the lists was recorded and organized by using Microsoft Excel software. A sample image from the classification recording list is shown in Appendix 3 as an example.

3.6. Data Analysis

In order to analyze the collected data, Microsoft Excel software was used for defining the percentages of the frequencies of occurrence and making comparison calculations between the target data. The data was analyzed in 3 ways; unit-based analysis, textbook-based analysis, and primary & secondary grades group-based analysis. For the unit-based analysis, the number of MIs occurrences were gathered together, and their percentages were defined. In order to define the occurrence numbers and percentages of each textbook's MIs, the total numbers calculated in unit-based analysis were gathered together. The obtained textbook-based analysis data was calculated by being separated into two groups as primary education grades as grade 2,3,4 and secondary education grades as 5,6,7,8 and it constituted the primary & secondary grades group-based analysis. By gathering all the textbooks' data together, a calculation was made to define the total number of MIs occurrences over all the grades in total with their percentages.

CHAPTER IV

FINDINGS

4.1. Introduction

In this chapter, the findings obtained through the quantitative data analysis are presented in detail through tables which are specific to target research questions.

4.2. The MIs Profiles of the EFL Textbooks

The MIs profiles represented in EFL textbooks in Turkish state primary and secondary education are casted in tables in this section. The first step was to analyze how many times a specific intelligence type was used in the activities. The obtained results for each textbook in a unit-based analysis are shown in tables (Table 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7). Then, the total averages for each EFL textbook are given in another table (Table 4.8). In the following step, the grades were divided into two groups as the primary education. As previously mentioned, in Turkish education English language education begins in the 2nd grade, so as the first step, in Table 4.1, the occurrence of MIs over the activities in the 2nd grade textbook is shown.

Table 4.1. Occurrence of MIs in the 2nd Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	LMI	NI	BKI	IEI	MI	IAI
1	12	100	100	25	41.7	16.7	16.7	8.3	0
2	14	100	50	50	0	14.3	14.3	7.1	0
3	14	100	71.4	21.4	7.1	5	21.4	7.1	0
4	13	92.3	53.8	69.2	0	38.5	23.1	23.1	0
5	14	100	92.9	21.4	7.1	42.9	28.6	14.3	14.3
6	13	100	76.9	53.8	0	7.7	15.4	23.1	15.4
7	15	100	66.7	40	0	46.7	20	20	0
8	14	100	92.9	35.7	100	7.1	0	21.4	0
9	16	93.8	87.5	37.5	100	12.5	6.3	12.5	18.8
10	15	100	86.7	40	100	20	26.7	20	6.7
Total	140	98.6	77.9	39.3	37.1	25.7	17.1	15.7	5.7

As seen in Table 4.1, there are 10 units in the 2nd grade's EFL textbook which in total is consisted of 140 activities with an average of 14 activities per unit. The VLI is seen to be the predominant intelligence type over the other types. Except for two units, it is catered fully in all the unit activities.

The next intelligence type following 98.6% of VLI is SVI with an average of 77.9% of occurrence frequency which means that in ¾ of the activities SVI is catered. Also, the minimum occurrence is seen in the second unit, but it is not less than 50%.

The next most frequently catered intelligence type is LMI with an average of 39.3% occurrence. This value is almost the half of SVI frequency percentage. When looked at the distribution over the units, the fourth unit seems to be the most LMI used unit comparing to the other units.

With an average of 37.1% frequency of occurrence, NI is the fourth most used intelligence type. However, the reason for this percentage stems from the eighth, ninth and tenth units. When looked at the other units, only the first unit shows a higher value as 41.7%, but the other units are less than 10%, four of which are not observed to be catered for NI.

According to the results, BKI is the next most used intelligence type following NI with an average of 25.7% of occurrence. It means that 1 activity out of every 4 caters for BKI involving tasks. While the most BKI used units are the third and seventh units, the sixth and eighth units catered for this type less than 10%.

IEI which is among the least used three intelligence types is seen as the next type with 17.1% frequency of occurrence after BKI. The maximum use of IEI is observed in the fifth and the tenth units with around 27%. On the other hand, in the ninth unit it is seen as less than 10% of use while in the eighth unit it is not catered. The second last and least used intelligence

type is observed to be MI with 15.7% of occurrence in total. It is seen that all the units give place to MI with the 23.1% maximum and 7.1% minimum use. The last intelligence type is IAI which is catered in the 5.7% of all the activities. While it is not used in six of the units, in the other four units it is catered with an average of 13.8%.

In Table 4.2, the occurrence of the MIs types in the activities taking place in the 3rd grade textbook is shown.

Table 4.2. Occurrence of MIs in the 3rd Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	IEI	BKI	LMI	NI	MI	IAI
1	22	100	90.9	31.8	40.9	54.5	18.2	18.2	9.1
2	23	91.3	91.3	21.7	26.1	34.8	0	21.7	13
3	22	100	95.5	40.9	31.8	27.3	27.3	18.2	9.1
4	22	100	95.5	27.3	31.8	31.8	9.1	22.7	9.1
5	23	95.7	95.7	39.1	34.8	30.4	0	13	17.4
6	22	95.5	90.9	36.4	31.8	31.8	0	13.6	9.1
7	20	100	95	40	35	15	0	15	10
8	22	95.5	95.5	31.8	31.8	27.3	4.5	18.2	9.1
9	21	95.2	95.2	28.6	19	14.3	71.4	23.8	9.5
10	23	100	87	34.8	39.1	47.8	87	13	26.1
Total	220	97.3	93.2	33.2	32.3	31.8	21.8	17.7	12.3

According to the results given in Table 4.2, it is seen that among 220 activities of 11 units evaluated in the 3rd grade EFL textbook, the predominant intelligence type is VLI with 97.3% of occurrence frequency. In all the units it is seen more than 90% and in half of the units, it is catered in each activity.The following intelligence type is SVI with 93.2% which is catered so close to VLI. There is no full occurrence in the units; however, it is observed more than 90% of the units except for unit 10 which is noted as 87%. It is also seen that in unit 2, 5, 8 and 9 it shows the same frequency as VLI.

When looked at the other intelligence types, it is displayed that none of them shows occurrence more than 33.2% which is the percentage of IEI. The maximum existence of IEI is seen as 40.9% which is less than half of SVI's minimum occurrence. The least use of it is noted as 21.7% given in unit 2.

BKI is the following most used intelligence type with 32.3% of occurrence, which shows a close frequency with IEI. While it is applied in the units with a minimum of 19% in unit 9, it shows the highest use in 1 as 40.9% of occurrence which is as same as the maximum use of IEI in unit 3.

The least three catered intelligence types are NI with 21.8%, MI with 17.7% and IAI with 12.3%. NI is not observed in four of the units, so what makes it reach at 21.8% is that it is used with a high percentage in units 9 (71.4%) and 10 (87%). When looked at MI, it is seen that it shows variety between 13% and 23.8%. As the least applied intelligence type, IAI shows a little wider band of fluctuation to MI's with a minimum of use with 9.1% and a maximum with 26.1%. In Table 4.3 the 4th grade's EFL textbook's MIs occurences are displayed.

Table 4.3. Occurrence of MIs in the 4th Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	LMI	IEI	IAI	BKI	MI	NI
1	17	100	47.1	47.1	29.4	17.6	29.4	11.8	0
2	19	100	68.4	36.8	36.8	10.5	21.1	5.3	0
3	15	100	80	6.7	20	53.3	6.7	13.3	0
4	19	94.7	68.4	5.3	21.1	36.8	15.8	10.5	0
5	20	95	60	6	20	30	10	10	0
6	16	100	87.5	18.8	25	12.5	18.8	6.3	6.3
7	17	94.1	76.5	17.6	23.5	17.6	23.5	11.8	0
8	23	100	65.2	21.7	17.4	8.7	8.7	17.4	39.1
9	15	100	73.3	20	33.3	26.7	20	6.7	6.7
10	16	93.8	75	31.3	31.3	25	6.3	6.3	0
Total	177	97.7	69.5	27.1	25.4	23.2	15.8	10.2	6.2

Regarding the findings obtained from the evaluation of the 4th grade EFL textbooks over 177 activities in total, the detailed occurrence data is given in Table 4.3. According to the results, VLI again is the predominant intelligence type comparing to other types with 97.7%. In six of the units, it is catered in all the activities and in four of the units it is seen with a minimum use of 93.7%.

SVI is observed to be the next most used intelligence type after VLI with an average of 69.5% of occurrence among 177 activities. It is seen in 87.5% of the activities in unit 3 which is the highest frequency of it; on the other hand, the least occurrence of it is seen in unit 1 with 47.1%.

The following intelligence types are seen less than 27.1%. With the 27.1% of occurrence, LMI is the third most catered intelligence type in the 4th grade EFL textbook. It shows a 60% of occurrence in the unit 5 over 20 activities which is the highest percentage that it reaches. In units 3 and 4 it is seen less than 10%.

In the activities catering for IEI, there is no frequency of occurrence noted as less than 10% unlike seen in two units in LMI category. The lowest rate for IEI is 17.4% noted in unit 8 and the highest one is 36.8% in unit 2. In total it is observed that IEI is catered in the 25.4% of the activities.

With an average of 23.2% of frequency, IAI is the next most used intelligence type in the 4th grade EFL textbook. When looked over all the units, it can be seen that it has a wide band of fluctuation between the minimum use of 8.7% and the maximum use of 53.3%.

The other least catered intelligence types are BKI with 15.8%, MI with 10.2% and NI with 6.2%. In three of the ten units, BKI is observed less than 10% and over the other units, it shows the highest percentage of use in unit 1 with 29.4%. On the other hand, in four units MI

is observed less than 10% and the highest mark for it is noted as 17.4% in unit 8. As for the least used type, NI is seen with a 6.2% of use. In seven units it is not observed and in two units it has an average of 6.5%. Only in unit 8, it shows its highest use with 39.1%.

As mentioned previously, 5th grade is the first year of secondary education in Turkish education system. In Table 4.4 the details for the use of MIs in 5th grade EFL textbook is given.

Table 4.4. Occurrence of MIs in the 5th Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	LMI	IEI	IAI	NI	BKI	MI
1	29	100	44.8	48.3	27.6	17.2	3.4	6.9	10.3
2	24	100	91.7	29.2	12.5	8.3	0	0	0
3	26	96.2	34.6	23.1	15.4	19.2	3.8	11.5	7.7
4	27	100	51.9	48.1	18.5	14.8	0	0	3.7
5	25	100	52	36	16	8	0	8	4
6	29	100	48.3	13.8	20.7	24.1	0	6.9	3.4
7	25	96	56	32	20	20	0	8	0
8	25	100	60	24	20	20	0	8	0
9	22	100	77.3	45.5	9.1	13.6	86.4	4.5	4.5
10	19	100	36.8	26.3	21.1	15.8	0	0	0
Total	251	99.2	55	32.7	18.3	16.3	8.4	5.6	3.6

According to the breakdown of the frequency of MIs occurrence in 5th grade EFL textbook in which 251 activities were evaluated, VLI is observed to be the most used intelligence type with 99.2%, which means it is used in almost all of the activities in 10 units. Except for two of the ten units, it is catered in each activity.

When looked at the next most used intelligence type, SVI is seen with 55% of frequency which is almost the half frequency level that VLI reaches. The maximum use of SVI is seen in unit 2 with 91.7%, and the least frequent use occurs in unit in unit 3 with 34.6%.

The third most used intelligence type of 5th grade EFL textbook is LMI which shows 32.7% of average use among the 251 activities. There is no unit that shows less than 10% occurrence of LMI, and there is no unit which caters for LMI more than 50% either. The minimum level of use is analyzed as 13.8% and the maximum one as 48.3%.

As for the next most applied types, it can be stated as IEI and IAI which show a very close percentage difference of occurrence between each other. While IEI is analyzed to be having 18.3%, IAI shows a 16.3% of frequency. However, rather than the total average, variations in a wider scope are observed. For example, while the band of fluctuation for IEI is between 9.15% - 27.6%, this band is narrowed in IAI catered activities as 8% - 20%.

NI, BKI and MI are the least three intelligence types which are catered among 251 activities. All of them show a close average of frequencies. For example, the total average for NI is observed as 8.4%, for BKI it is seen as 5.6% and 3.6% for MI. Another similarity is that each of these types are not observed in multiple units. In Table 4.5 the breakdown of the statistics for the frequency levels of occurrence of MIs in 6th grade EFL textbook is shown.

Table 4.5. Occurrence of MIs in the 6th Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	IEI	LMI	IAI	BKI	NI	MI
1	17	100	58.8	29.4	47.1	23.5	23.5	0	0
2	18	100	50	55.6	5.6	16.7	22.2	0	5.6
3	14	100	85.7	21.4	28.6	14.3	21.4	0	7.1
4	17	100	52.9	41.2	23.5	23.5	11.8	70.6	0
5	14	100	57.1	21.4	21.4	28.6	7.1	0	0
6	16	100	62.5	37.5	0	43.8	12.5	6.3	0
7	15	100	60	46.7	46.7	13.3	13.3	0	0
8	19	100	36.8	31.6	42.1	10.5	15.8	0	0
9	18	100	38.9	33.3	44.4	5.6	16.7	61.1	0
10	21	100	38.1	23.8	19	19	19	0	0
Total	169	100	52.7	34.3	27.8	19.5	16.6	14.2	1.2

As given in the table, there exist 10 units and 169 activities which were evaluated in the 6th grade EFL textbook. According to the statistics, it is seen that VLI is the most used type which is completely catered in every single activity in every unit.

SVI is the following intelligence type after VLI with 52.7% occurrence which is slightly more than the half of VLI's rate. Except for the last three units, the other seven units are observed to cater for SVI with a minimum of 50% frequency rate. The highest record for SVI is seen in unit 3 as 85.7%. The next most used intelligence type is IEI with an occurrence rate of 34.3%. When looked the distribution of the IEI over the units, it is shown that the minimum use of it is 21.4% in the 3rd and 5th units. The highest frequency of use which is observed is 55.6% in unit 2. LMI is the third most applied type over 169 activities with an average of 27.8% of occurrence. In a detailed look, it is seen that in one of the units which is unit 6, it is not observed, and in the 2nd unit, it is noted as 5.6% that makes it a low use. On the other hand, in four units it is observed more than 40%.

The following three intelligence types are IAI, BKI and NI, all of which show a close ratio in total averages in statistics. IAI is seen with an occurrence frequency of 19.5%; BKI is 16.6% and NI is 14.2%. However, checking each percentage given for each unit, differences are seen. For example, while there is no 0% in IAI and BKI, 7 of 10 units do not cater for NI. Another example is that in two of the units NI is observed as 61.1% and 70.6%, but these rates are not reached both in IAI and BKI categories. In IAI class, the maximum rate of use is 43.8% while it is 23.5% for BKI.

As for the least used intelligence type, MI is seen with 1.2% of use. In only two units it is observed with 5.6% and 7.1%, and the other units do not show any percentage for the use of MI in the activities.

Another evaluated EFL textbook is the one used by the 7th grades in secondary education, the details of which are shown in detail in Table 4.6.

Table 4.6. Occurrence of MIs in the 7th Grade EFL Textbook (in percentages)

Units	f	VLI	SVI	LMI	IEI	IAI	NI	BKI	MI
1	22	100	36.4	27.3	18.2	13.6	0	4.5	4.5
2	22	95.5	36.4	45.5	13.6	13.6	0	4.5	0
3	22	95.5	54.5	27.3	18.2	22.7	0	9.1	0
4	22	95.5	50	36.4	9.1	4.5	77.3	4.5	0
5	22	100	31.8	27.3	18.2	18.2	0	9.1	0
6	19	100	36.8	31.6	21.1	21.1	0	15.8	0
7	20	100	45	35	10	10	0	5	0
8	19	94.7	31.6	26.3	15.8	21.1	0	10.5	0
9	14	92.9	64.3	50	14.3	7.1	71.4	7.1	0
10	25	100	40	52	16	8	0	16	0
Total	207	97.6	42	35.7	15.5	14	13	8.7	0.5

As seen in Table 4.6, the MIs profile of 7th grade EFL textbook is displayed over 10 units and 207 activities in total. VLI is present in 97.6% of the activities and this percentage makes it the most frequently catered intelligence type in the textbook. In a detailed look, none of the units seen under 92.9%.

Looking at the next type listed in the table, 42% presence is seen in SVI category which makes it the second most frequently used type. The band of fluctuation of occurrences ranges between the minimum rate of 31.6% and the maximum rate of 64.3%. LMI is the third most frequently addressed type in the activities in all the units with 35.7% of presence. Through a further look, it can be seen that the lowest rate for LMI is 26.3% taking place in unit 8 and the highest rate reached is 45.5% which is seen in unit 2.

Moving to the other MIs types, it is demonstrated that IEI, IAI and NI show a close overall score of presence over 207 activities. While IEI is used in 15.5% of the activities, IAI

is represented in 14% and NI is addressed in 13% of the activities. Another similarity is seen between IEI and IAI when looked at the distribution rates over the units. In most of the units, they show a close occurrence to each other. Apart from the similarities mentioned, there are differences in the percentages given for the units. For example, NI is present in only two units and the other units are noted as having no catering for NI; however, there is no 0% of occurrence for IEI and IAI. According to the results, the last second least addressed intelligence type is BKI with a rate of 8.7%. Only three units are noted to be including BKI involved activities as more than 10%, but the other units are shown to have less than 10% of BKI presence. When looked at the least used intelligence type, MI is seen with 0.5% of occurrence. In only one unit it is given place as 4.5%, but the other 9 units, there is no representative activity involving MI.

As mentioned before, in Turkish education system 8th grade is the last year of the secondary education, so the last EFL textbook evaluated for this thesis study is the one used by the 8th grades. In Table 4.7, the details of the evaluation for the MIs distribution in the activities taking place in the 8th grade EFL textbook is given.

Table 4.7. Occurrence of MIs in the 8th Grade EFL Textbook (in percentages)

Units	f	VLI	LMI	IAI	IEI	SVI	NI	BKI	MI
1	31	100	58.1	16.1	25.8	12.9	0	9.7	3.2
2	28	100	28.6	42.9	32.1	25	0	3.6	3.6
3	28	100	67.9	25	21.4	32.1	0	3.6	3.6
4	24	100	66.7	0	29.2	12.5	0	20.8	4.2
5	25	100	32	36	24	12	0	8	0
6	26	100	57.7	38.5	38.5	26.9	7.7	7.7	0
7	25	100	36	40	20	32	3	1	0
8	30	100	40	36.7	26.7	16.7	0	6.7	3.3
9	33	100	57.6	27.3	18.2	27.3	12.1	3	3
10	21	100	81	47.6	23.8	28.6	61.9	0	0
Total	271	100	52	30.6	25.8	22.5	10	7.4	2.2

In the 8th grade EFL textbook, there are 10 units and 271 activities in total. Looking at the table, it is seen that the predominant intelligence type is VLI with a full frequency of occurrence in all the activities.

The following intelligence type which is addressed after VLI is LMI with 52% of occurrence. The highest percentage of LMI is seen in the 10th unit with 81% of use, and the lowest frequency observed is in the 2nd unit with 28.6%. The third most frequently used intelligence type is noted as IAI which is present in the 30.6% of the activities. When looked at the further details, it is displayed that in the 4th unit it has no representation; however, in the other units it has a minimum use of 16.1% and a maximum use of 47.6%.

IEI and SVI represent the next mostly catered MIs types in the activities by displaying close statistics. It is shown that IEI is used in the 25.8%, and SVI is used in the 22.5% of the activities. Both types do not represent a presence less than 10% or more than 40% either.

Within the same point, NI and BKI can be touched together as well due to the close overall scores they represent. NI is present in the 10% and BKI is catered in the 7.4% of the activities. To mention about the differences between each types, although both types show no presence in some unit/s, this non-occurrence is more observed in NI category, because while there are six units which do not involve NI, there is one unit which do not show any BKI activity. On the other hand, NI displays high rates, such as 61,9%, but the maximum level that BKI reaches is 20.8%.

In the table, the least represented intelligence type is seen with MI which has 2.2% of occurrence in the activities. While four of the units do not represent any occurrence of MI, the other six units contain MI involved activities with low percentages.

Having depicted the occurrence of MIs types in the EFL textbooks used in Turkish primary and secondary education in a detailed form as unit-based evaluation, to be able to make a comparison between each EFL textbooks, Table 4.8 was prepared to show MIs presence over the evaluated textbooks.

Table 4.8. Occurrence of MIs in All Grades' EFL Textbooks (in percentages)

Textbook	f	VLI	SVI	LMI	IEI	IAI	BKI	NI	MI
2nd Grade	140	98.6	77.9	39.3	17.1	5.7	25.7	37.1	15.7
3rd Grade	220	90.7	87	29.1	29.6	10.9	29.6	20.2	15.8
4th Grade	177	97.7	69.5	27.1	25.4	23.2	15.8	6.2	10.2
5th Grade	251	99.2	55	32.7	18.3	16.3	5.6	8.4	3.6
6th Grade	169	100	52.7	27.8	34.3	19.5	16.6	14.2	1.2
7th Grade	207	97.6	42	35.7	15.5	14	8.7	13	0.5
8th Grade	271	100	22.5	52	25.8	30.6	7.4	10	2.2
Total	1435	98.7	56.6	36	24.3	18.3	15	14.7	6.7

When looked at the Table 4.8, it displayed that there are 8 EFL textbooks which are evaluated based on 1435 activities taking place in all these textbooks. The statistics show that the predominant intelligence type used over all the textbooks is VLI. It is present in 98.7% of the activities. In none of the textbooks, it is represented less than 97.6%.

The next most frequently addressed intelligence type is SVI with a 56.6% of use. Apart from the 2nd grade occurrence, it is seen that the highest value it reaches occurs in the 3rd grade textbook, and it gradually decreases as the grade level raises until the 8th grade with 22.5% of occurrence. SVI is followed by LMI according to the overall frequency rates. It is displayed that LMI is represented in 36% of the activities over all the evaluated EFL textbooks. While the maximum occurrence of it is seen in the 4th grade with 27.1%, in the 8th grade textbook it reaches at its highest frequency of use with 52%.

The next most commonly catered intelligence type is IEI which is 24.3% in total. The details show that it doesn't represent a wide fluctuation band since its range is limited with around 15% of movement. The lowest occurrence of IEI representation is observed in the 7th grade's textbook with 15.5% of frequency while the highest use is seen in the 6th grade with 34.3%. IAI is shown as the following intelligence type in the statistics. It is noted that IAI is observed in the 18.3% of the textbooks. In the 2nd grade textbook it is catered in the 5.7% of the activities; on the other hand, it shows its highest occurrence rate in the 8th grade textbook with 30.6%.

BKI and NI show a close overall percentage; therefore, both intelligence types can be mentioned together. According to the statistics, BKI is present in 15%, and similarly NI is represented in 14.7% of the activities in all the textbooks. In a detailed look, it can be seen that the lowest frequency rate for BKI is 5.6% and it is 6.2% for NI. When looked at the highest frequency rates, BKI displays 29.6%, and NI represents 37.1% of occurrence. The least catered intelligence type is seen as MI with 6.7% of occurrence in the evaluated 1435 activities. The maximum use of MI is seen in the 3rd grade's textbook with 15.8% of occurrence. The minimum use is observed in the 7th grade with 1%.

In order to compare the MIs profiles occurrences in two separate groups as primary education grades' and secondary education grades's in EFL textbooks, Table 4.9 is displayed.

Table 4.9. Occurrence of MIs in Primary and Secondary Education EFL Textbooks in two Groups (in percentages)

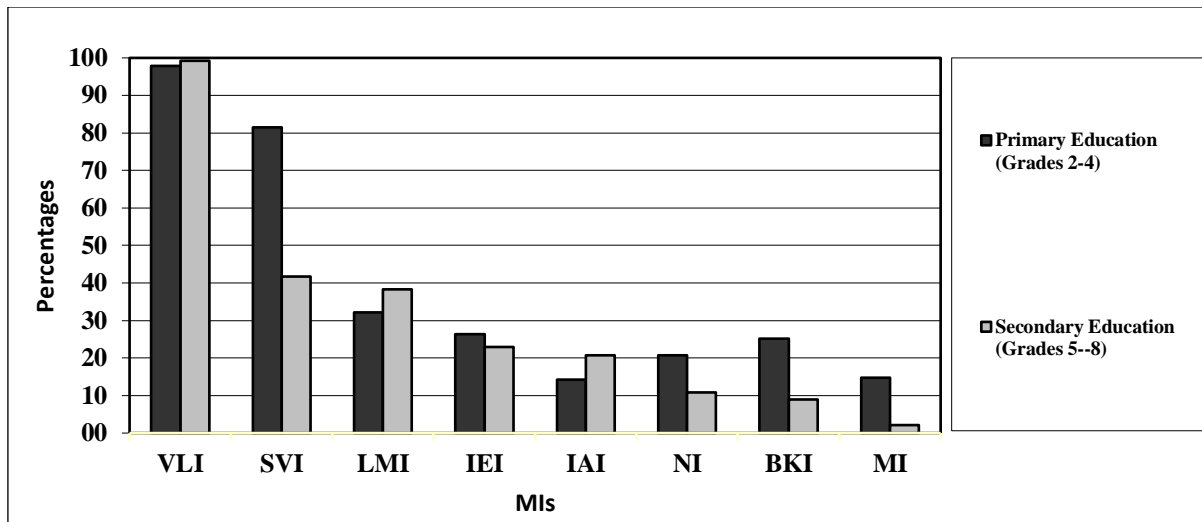| Textbook Groups	f	VLI	SVI	LMI	IEI	IAI	NI	BKI	MI
Primary Education	537	97.8	81.4	32.2	26.4	14.2	20.7	25.1	14.7
Secondary Education	898	99.2	41.8	38.3	22.9	20.7	11	8.9	2.1

As seen in Table 4.9, there are 537 evaluated activities taking place in the EFL textbooks used in the primary education (grades 2,3,4), and 898 activities are in the secondary

education (grades 5,6,7,8). The statistics show that VLI is the predominant intelligence type in both primary and secondary education EFL textbooks. It is represented as 97.8% in the primary education and as 99.2% in the secondary education. Similarly, in both groups SVI is the second mostly used intelligence type. In primary education it is represented as 81.4% and in the secondary education it is seen in the 41.8% of the activities. The distribution of LMI is similar to VLI and SVI, which constitutes the third mostly catered intelligence type both in the primary and secondary education EFL textbooks. In the primary education it is observed as 32.2% and in the secondary education it is seen as 38.3%. The next most occurring intelligence type is IEI in both groups. It is displayed with a frequency rate of 26.4% in the primary education and 22.9% in the secondary education group.

The next intelligence types show differences unlike the first four types. IAI is seen as the least frequently catered intelligence type in the primary education group with 14.2% of occurrence; however, it is the fifth mostly used type in the secondary education. The least represented intelligence type for the secondary education group is MI with 2.1% which is 14.7% in the primary education which holds the seventh place in its group. NI is seen as the sixth mostly catered intelligence type in both groups. In the primary education it is observed in 20.7% while it is seen in the 10.9% of the activities in the secondary education group EFL textbooks. In the primary education BKI is represented as 25.1% while it is catered in 8.9% of the secondary education.

Due to the mixed sequence of occurrence among the least represented intelligence types shown in Graph 4.1, the researcher decided on presenting a graph with the aim of visualizing the same statistics in a sequence demonstrated in bars.

Graph 4.1 Occurrence of MIs in Primary and Secondary Education EFL Textbooks

Graph 4.1 is casted to be used for supporting the details casted for the primary and secondary education group. As seen in the graph, there is a gradual decrease among the initial four intelligence types which are VLI, SVI, LMI and IEI in both groups. To mention again, these types are the predominant ones in overall values both in primary and secondary grades. However, the other four types which are IAI, NI, BKI and MI do not show a parallel movement. To mention about another difference, it is seen that secondary education grades show more occurrence rates when compared to primary education grades. The overweighing types are VLI, LMI and IAI. Within the same line, when considered this difference from the primary education group's side, the overweighing intelligence types are seen as SVI, IEI, NI, BKI and MI.

CHAPTER V

CONCLUSION AND DISCUSSION, AND SUGGESTIONS

5.1. Introduction

In this chapter of the thesis, the findings obtained through the quantitative data analysis are summarized by the researcher and answers for the research questions are aimed to be given.

5.2. Conclusion and Discussion

As stated previously, the aim of this thesis study was to find the use of MIs in the EFL textbooks which are implemented in Turkish state primary and secondary schools. Within this frame analysis was conducted in order to obtain answers to the following research questions.

1- How frequently are the MIs represented in the activities in the EFL textbooks used in Turkish primary and secondary education?

2- What are the predominant and least represented intelligence types in EFL textbooks used in Turkish state primary and secondary schools?

3- What are the similarities and differences in EFL textbooks in terms of two groups; primary and secondary education?

As the findings for the first two research questions are directly related to each other, each question is discussed together below.

As given in the findings, in Turkish EFL textbooks used in the state primary and secondary schools, the total frequency of MIs types representation, in a descending order, is as follows; VLI (98.7%), SVI (56.6%), LMI (36%), IEI (24.3%), IAI (18.35), BKI (15%), NI (14.7%), MI (6.7%).

According to the occurrences of MIs, the predominant intelligence type is seen as VLI in every EFL textbook used both in primary and secondary schools. The possible reason of this finding can be related with the fact that the evaluation has been conducted on language teaching textbooks. As Christison (1996) suggests, VLI deals with the linguistic aspects of the intelligence on performing the ability to use words effectively both orally and in writing. Also, as given in a wider breakdown of VLI in the findings focusing on the units of each textbook, it is observed that every unit predominantly cater for VLI. Checking through the related studies which are shared in the literature review section, it is seen that VLI is stated to be the predominant intelligence type (Palmberg, 2001; Snider, 2001; Botelho, 2003; Oliveira, 2009; Kırkgöz, 2010; Razmjoo and Jozaghi, 2010; Taase, 2012; Schlumpergerova, 2013; Arikan, Soydan and Isler, 2014; Al Omari, Batanieh and Smadi, 2015; Jado, 2015; Al Seyabi and A'Zaabi, 2016; Safranj, 2018; Al-Mekhlafi, 2018).

The next frequentative intelligence type is SVI, which is seen more than half of all the activities examined. The reason for this SVI's presence in the activities can be grounded on Gardner's (2011) suggestion that a person may have little ability to transform the abstract world into drawing or imagining; therefore, illustrations and pictures can be considered to be used in the coursebooks as a supportive means of teaching. In previously conducted analyses (Botelho, 2003; Kırkgöz, 2010; Razmjoo and Jozaghi, 2010; Taase, 2012; Arikan, Soydan and Isler, 2014; Wattanborwornwong and Klavinitchai 2016; Al-Mekhlafi, 2018) SVI was observed to be the second most frequently applied intelligence type. Also, in the analyses depicted by Oliveira (2009) and Al Omari, Batanieh and Smadi (2015) VLI is represented more than 50% of the activities similarly to the findings obtained in this study.

As for the third mostly used intelligence type, LMI is observed with an occurrence in 36% of the activities. During the analyses, LMI was the most challenging type to make sure it existed in an activity. To illustrate, defining whether an activity involved logical thinking skill

or not was not easy since it is an abstract aspect of the intelligence. In order to make the right choice, teachers' views were needed as they were the actual guides of the activities through activating the skills, such as critical thinking, reasoning, finding a relationship or so on. As mentioned before, LMI is activated when setting reasoning between actions, objects and ideas (Nardi, 2001) deductively or inductively; to recognize and manipulate abstract patterns and relationships (White et al., 1995, p. 42); to analyze problems, detect patterns, perform mathematical calculations, show scientific reasoning and deduction (Gardner, 1999). While LMI was mostly present in some textbooks in the activities containing games or picture matching tasks in a close relationship with SVI; in some textbooks, it was often observed in the gap filling tasks alongside with VLI. In a similar way, LMI is stated to be among the top three catered intelligence types in some studies (Razmjoo and Jozaghi, 2010; Arikan, Soydan and Isler, 2014; Taase, 2012; Al Seyabi and A'Zaabi, 2016; Safranj, 2018; Al-Mekhlafi, 2018).

According to the findings, the next mostly represented intelligence type is IEI with an average of 24.3% occurrence in the activities. As stated by Botelho (2003) IEI is the prompter for a successful interaction with other individuals in various situations like participating in a teamwork, communicating with others in a social context. Therefore, as examined in the activities, IEI involving ones were mostly noted for asking students to run the task in pairs or in groups. On the other hand, some activities were observed to be focusing on the intercultural awareness of students; hence, such activities were also given place in IEI category which is listed in the activity checklist as suggested by Christison (1996). A sample illustration for such activities is given in Appendix 4. In the evaluations conducted by Palmberg (2002), Wattanborwornwong and Klavinitchai (2016) a "very close" rate of occurrence is displayed while it can be considered as "close" in the evaluations run by Razmjoo and Jozaghi (2010), Schlumpergerova (2013), Al Omari, Batanieh and Smadi et al. (2015) as similar to what is obtained in the evaluations of this thesis study.

Following the most frequent four types of intelligences, the more of the least represented ones is IAI with 18.3%. As Gardner (1993) suggests, IAI is based on the ability of an individual's self-awareness, the common feature of the activities catering for IAI in the textbooks was the tasks which focused on the personal ideas, experiences, self-evaluations of the students. Since such activities are not always implemented, the received rate of occurrence of IAI does not show a high ratio accordingly. Checking through the related evaluations conducted, there are similar results in some studies (Razmjoo and Jozaghi, 2010; Al Seyabi and A'Zaabi, 2016; Wattanborwornwong and Klavinitchai, 2016) when compared to the one obtained in this thesis study.

Regarding the next least addressed intelligence type, BKI is observed with a frequency rate of 15%. With a detailed look over the textbooks, BKI shows a higher frequency in the 2nd, 3rd and 4th grade textbooks comparing to other grades. According to Gardner (2011) BKI constitutes the ability to think in movements with skillful use of body, and also with a sense of timing and coordination to solve problems. During the evaluation, the movement involving activities were classified in this category. However, not all the movements were regarded as BKI catered activity. To illustrate, writing is an activity as well and it needs hand movement, but when designating BKI, it was excluded because writing, was not the target skill to be focused as skillful use of the hand. Similar to the data obtained in this study, there are some studies (Palmberg, 2001; Botelho, 2003; Oliveira, 2009; Kırkgöz, 2010; Razmjoo and Jozaghi, 2010; Schlumpergerova, 2013; Al Omari, Batanieh and Smadi, 2015; Jado, 2015; Safranj, 2018; Al-Mekhlafi, 2018). suggesting BKI to be represented among the least applied four intelligence types.

Another least represented intelligence type is NI with the 14.7% of occurrence in the activities. As Gardner (1999) states, NI focuses on the ability to recognize and classify various, species, flora, fauna in the environment. Accordingly, the activities which involves natural

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items were recorded as catering for NI. However, the distributions of such activities were observed to be represented in clusters over the units. To illustrate, as given in the findings in detail, while some units do not cater for NI, in some units almost all of the activities cater for it. The reason for this is the unit itself. When the unit is devoted to a topic about the nature, the majority of the tasks were observed to be involving natural items. Relevant to the outcome obtained from the evaluations of this study, similarly NI is displayed to be among the least used intelligence types in some studies (Palmberg, 2001; Botelho, 2003; Oliveira, 2009; Kırkgöz, 2010; Razmjoo and Jozaghi, 2010; Taase, 2012; Arikan, Soydan and Isler, 2014; Al Omari, Batanieh and Smadi et al., 2015; Jado, 2015; Al Seyabi and A'Zaabi, 2016; Wattanborwornwong and Klavinitchai, 2016; Al-Mekhlafi, 2018).

As for the least represented intelligence type, the results address MI. During the evaluation pace, while MI was observed to be implemented in songs, chants in the primary grades, it was rather catered in intonation awareness involving activities or sound recognition in the higher grades. Similarly, MI is stated as the least represented intelligence type in some studies conducted (Palmberg, 2001; Botelho, 2003; Taase, 2012; Al Omari, Batanieh and Smadi, 2015; Jado, 2015; Al Seyabi and A'Zaabi, 2016).

The 3rd research question of this thesis study was as follows; What are the similarities and differences between primary and secondary schools' MIs profiles in the applied EFL textbooks?

In order to find the answer for this research question, after gathering all grades' MIs profile representations, the grades were divided into two groups as primary education with the grades 2, 3, 4 and secondary education with the grades 5, 6, 7, 8. When these two groups of grades are put in a comparison, it is seen that there are four intelligence types which display the same dominance order; VLI, SVI, LMI and IEI. With a further explanation, these types

show the same descending order in both primary and secondary education EFL textbooks without considering the ratios. However, when the ratios are considered, SVI in primary education group is two times more than it is in the secondary education group. As mentioned before, this fact may be grounded for the necessity of transferring the abstract world into visualized form (Gardner, 2011) and with a question mark to be furtherly investigated, it can be thought that the younger the learner is the more visual aids they are provided with. Kırkgöz (2010) has a supportive evaluation data which can be related to this argument that in her study depicted on the $4^{th} - 8^{th}$ grades' EFL textbooks, SVI shows a gradually increasing frequency from the 8th grade to the 4th grade.

On the other hand, there are some differences noticed among the occurrences of the other four types; IAI, NI, BKI and MI, all of which are less frequently represented ones both in primary and secondary education grades' textbooks. In a detailed comparison, although IAI in both groups shows a close ratio in use, it is more common in secondary education group with a 7% more frequency. The possible reason for this could be the exercise types applied. To illustrate, while the activities catering for IAI in both groups include personal question-oriented tasks, in the secondary grades, there are projects and self-evaluations which do not exist as often as they are in the primary grades. Also as shared by Schlumpergerova (2013), IAI shows a close frequency in terms of secondary education textbooks when compared to the data obtained in this study. In addition to this study, Al Omari, Batanieh and Smadi's study (2015) also shows a close similarity that from the lower grades to the higher grades IAI is seen more frequently.

Another significant difference is seen in NI category. In primary education EFL textbooks it is implemented two times more than it is in the secondary education group. The reason for it to be showing more occurrence in primary education could be its significant frequency in the 2nd grade textbook. As previously stated, unlike the other textbooks in some

units of which there is no occurrence of NI, it is seen to be present in each unit of the 2nd grade's textbook. As for another intelligence type between two groups, BKI's occurrence is seen to be displaying a meaningful difference. In the primary education group, it is almost three times more than it occurs in the secondary education group. The probable reason for this difference could be suggested in a relationship with the younger learners' motivation spans. As Armstrong (2009) suggests, it can be difficult for students to sit for a long time. Considering this fact in a relation with the younger learners, the preponderance of the primary education grades group is not surprising. In Al Omari, Batanieh and Smadi's study (2015) similar to this study, BKI shows a higher level of occurrence in early grades comparing the others.

In addition to the comparisons between the groups, MI is observed to be representing a significant ratio difference. In the primary education group, it is present as 7 times more than it is in the secondary education group. It can be related to the occurrence of more songs and chants in the activities taking place in the primary education grades' EFL textbooks. Although the number of songs or any musical item's presence is not constituting a high occurrence in the higher grades, there are not many but some tasks focusing on the intonation and correct pronunciation of the syllables or sounds. As Demirezen (2009) suggests, when learning intonation in foreign language education, musical intelligence is activated. Such activities also take place in the primary education group textbooks. Similarly, Al Omari, Bataineh and Smadi (2015) share a similar data that MI displays a higher occurrence in the earlier grades.

To mention about another difference, in the graph (Graph 4.1) which is given in the findings section, some intelligence types are illustrated to be having higher frequencies against the other group. For example, for secondary grades, VLI, LMI and IAI are the only overweighing types comparing to the primary grades. The reason for secondary education grades' representing more of these types could be related to the number of grammar exercises taking place. In secondary education EFL textbooks there is a more variety of grammar

exercises. Within the same idea, when we consider this difference from the primary education group's side, the overweighing intelligence types are seen to be SVI, IEI, NI, BKI and MI. As previously mentioned, and supported with some studies from the literature, these types' being represented in younger grades textbooks with a more frequency of occurrence may briefly mean that when developing these textbooks, younger learners' need for activities that involve music, movement, pictures, animals, interaction etc. were considered in a supportive way.

5.3. Suggestions

In this thesis study, 7 EFL textbooks used in Turkish state primary and secondary schools were evaluated in terms of MIs profiles within the frame of MIT. The aim was to observe the integration of MIs in the textbooks. As given in findings and interpreted in discussion, the occurrence level of predominant intelligence types shows similar findings which were previously obtained. At this point, the suggestion could be related to less frequently represented intelligence types. In the upcoming textbooks which will be applied in the following education years, activities catering for more intelligence types may be designed so that such less used types could be enriched. To illustrate, rather than giving place to NI in clusters in some specific units, it may be designed to expand on the other units as well. This might help for the continual activation of the awareness towards natural items that may create a better understanding for carrying environmental responsibility. I believe that such updates over the activities can also contribute to motivation of the students.

Since this study was limited to primary and secondary school's textbooks, the framework and the implementation of MIs in high school education may be furtherly studied, so that it could create a comparative feedback with regard to the relationship between high school and primary & secondary school EFL textbooks. Also, as mentioned before, MIT was decided to be integrated into Turkish ELT curriculum in 2006; therefore, from the very first

year of the implementation to current education year, every designed EFL textbooks may be evaluated to view the process. Hence, a new insight may be gained towards the implementation of MIs in EFL textbooks.

Finally, from the pedagogical perspective, there should be a settled understanding towards implementing MIT within ELT. For example, teachers may be taken in orientation programs by which they could have a further vision of MIT that could accordingly shape their approaches in designing materials, implementing teaching skills in the classroom, understanding the individual differences among students, creating activities etc. Similarly, these programs can be given to pre-service teachers as an integration in methodological studies, material developments, teaching skills and so on. Naturally, by running such developmental programs, there could arise a critical look towards the materials used. This could also affect the future of the textbooks as well, because as long as the teachers are kept active in understanding of MIs, they can suggest constructive feedbacks; therefore, new textbooks which are richer in MIs may come up.

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Appendix 1. Circling as a BKI involving task. (3rd Grade textbook / English 3; p. 27)

Appendix 2. Circling task which is not aiming a BKI skill activation. (8th grade textbook / Moonlight; p.28)

SELF-CHECK

1 Circle the odd word out.

1. casual-trendy-fashion-stylish
2. serious-teenager-impressive-ridiculous
3. clothing-impressive-snob-attractive
4. unbearable-awful-bad-terrific

Appendix 3. A sample image from the data recording process of MIs profiles' classifications.

	A	B	C	D	E	F	G	H	I	J	K
1			GRADE 5								
2			MIs PROFILES IN UNIT 6								
3		TASKS	VLI	SVI	LMI	BKI	IEI	MI	NI	IAI	
4		1	1							1	
5		2	1	1							
6		3	1				1			1	
7		4	1	1							
8		5	1	1							
9		6	1								
10		7	1	1							
11		8	1								
12		9	1								
13		10	1				1			1	
14		11	1	1		1	1				
15		12	1								
16		13	1	1	1						
17		14	1	1			1				
18		15	1	1							
19		16	1							1	
20		17	1								
21		18	1	1	1						
22		19	1		1		1				
23		20	1				1			1	
24		21	1					1			
25		22	1	1		1				1	
26		23	1	1						1	
27		24	1								
28		25	1		1						
29		26	1	1							
30		27	1	1							
31		28	1	1							
32		29	1							1	
33			29	14	4	2	6	1	0	7	

Appendix 4. A sample for IEI involving activity targeting intercultural awareness. (7th grade textbook / English 7; p.38)

UNIT 7 SUPERSTITIONS

1. Look at the pictures and write the phrases for the superstitions in the correct list.

BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin/ raporumun kağıt ve elektronik kopyalarının Akdeniz üniversitesi Eğitim Bilimleri Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım.

☐ Tezimin tamamı her yerden erişime açılabilir.

☐ Tezim sadece Akdeniz Üniversitesi yerleşkelerinden erişime açılabilir. Tezimin ……

☐ yıl süreyle erişime açılmasını istemiyorum. Bu sürenin sonunda uzatma için başvuruda bulunmadığım takdirde, tezimin tamamı her yerden erişime açılabilir.

…/…/2019

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PLAGIARISM REPORT

Ramazan Özbay Plagiarism Report

ORIJINALLIK RAPORU

%**10**	%**8**	%**4**	%**8**
BENZERLIK ENDEKSI	İNTERNET KAYNAKLARI	YAYINLAR	ÖĞRENCI ÖDEVLERI

BIRINCIL KAYNAKLAR

1	**Submitted to University of KwaZulu-Natal** Öğrenci Ödevi	%**1**
2	**www.mcser.org** İnternet Kaynağı	<%**1**
3	**www.lume.ufrgs.br** İnternet Kaynağı	<%**1**
4	**erwinwidiyatmoko.files.wordpress,com** İnternet Kaynağı	<%**1**
5	**Submitted to Walden University** Öğrenci Ödevi	<%**1**
6	**Submitted to San Diego Christian College** Öğrenci Ödevi	<%**1**
7	**de.slideshare.net** İnternet Kaynağı	<%**1**
8	**www.questia.com** İnternet Kaynağı	<%**1**
9	**Submitted to Higher Education Commission**	<%**1**