INVESTIGATING THE REPRESENTATION OF MULTIPLE INTELLIGENCES THEORY IN TPSOL TEXTBOOKS

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ABSTRACT

As the main applicable language resources in classrooms, textbooks provide the primary source of information, and they serve the foundation of instruction and transfer the curriculum objectives. Therefore, teachers should be conscious in choosing the right textbooks and activities for their students. The purpose of this study is to investigate one series of commonly used TPSOL textbooks in light of Multiple Intelligences Theory. Three Textbooks of Farsi Biyamuzim series were analyzed using a MI checklist developed by the present researchers based on the review of the related literature and frameworks of the theory. Careful analysis of the activities revealed that textbooks mostly catered for verbal/linguistic, visual/spatial, logical/mathematical, and interpersonal intelligences. The least dominant intelligence were intrapersonal, musical, and naturalist intelligence types and no example of the bodily/kinesthetic intelligence was observed in the analyzed textbooks' activities. In addition, the results of the study did not show any significant effect of proficiency level on application of intelligence types in textbooks. The findings of the study suggest the administrators and material developers to consider the necessity of applying various intelligence types in designing TPSOL textbooks.

Keywords: Multiple Intelligences (MI) Theory, TPSOL Textbooks, Textbook Evaluation, Textbooks' Intelligences Profile.

INTRODUCTION

In 1980s, Howard Gardner proposed the theory of Multiple Intelligences (MI). This theory stresses different learning styles, individuals' uniqueness, and potentials to meet their needs and interests. Instead of viewing intelligence as a unitary concept, Gardner assumed that all human beings have different and unique intelligences. Drawing on evidence and research findings in the field of biology, genetics, and psychology, Gardner introduced human intelligence as eight different kinds of categories, namely linguistic, logical, musical, spatial, bodily-kinesthetic, intrapersonal, interpersonal and naturalist intelligence. Gardner (1993) mentioned that every human being has all types of intelligences, but to different degrees, none of them is superior to others, and each of which can be developed to a higher level of performance, provided with the right learning context.

With the emergence of the new theory, a great deal of changes has been observed in school curriculums, especially in the realm of language learning, syllabus design and materials evaluation. MI theory provides teachers with innovative ideas in terms of classroom instruction and helps them to make decisions on the best teaching strategies and learning tools in light of students' individual differences and intelligence profiles. In the words of Christison (1996), through applying MI theory, teachers can "address the great diversity in learners; develop learners' intelligences and create an individualized learning environment" (p.10). In the same vein, Snider (2001) also mentioned that "MI theory-related materials have the strong potential to improve foreign language instruction because they engage learners' innate abilities" (p. 6).

On the other hand, one of the main important materials in language learning is the use of textbooks. The importance of textbooks in the field of language teaching and learning has been emphasized by many researchers, namely Hutchinson and Torres (1994) who believed that,

> *The textbook is an almost Universal element of [English language] teaching. Millions of copies are sold every year, and numerous aid projects have been set up to produce them in [various] countries. No teaching-learning situation, it seems, is complete until it has its relevant textbook (Rozmjoo & Jozaghi, 2010, p.61).*

Therefore, the authors should make sure "that careful selection is made, and that the materials selected closely, reflect the aims, methods, and values of the teaching program" (Cunningsworth, 1995, p.7). For having an appropriate selection of teaching materials, students' capabilities and language learning styles should be taken into consideration. Accordingly, different criteria and checklists have been proposed, one such appropriate criterion is based on Gardner's theory of Multiple Intelligences.

The recent literature entails the increasing interest for evaluating the ELT textbooks and teaching materials in light of MI theory (Botelho, 2003; Estaji & Nafisi, 2014; Ibragimova, 2011; Kırkgöz, 2010; Razmjoo & Farmer, 2012; Razmjoo & Jozaghi, 2010; Tasse, 2012); however, lack of parallel studies on Teaching Persian to Speakers of Other Languages (TPSOL) textbooks is obvious. Therefore, the main purpose of the study is to evaluate one series of commonly used TPSOL textbooks in Persian language teaching centers, namely Farsi Biyamuzim (Let's Learn Persian), to determine the extent to which MI theory is reflected in these textbooks. The present study seeks to answer the following questions:

1. What type of intelligences are reflected in Farsi Biyamuzim (Let's Learn Persian) series textbooks' activities?
2. Does the level of the textbooks have any significant effect on representation of textbooks' MI profile?

1. Literature Review

Multiple Intelligences (MI) theory was proposed by Howard Gardner in 1983, with the publication of Frames of Mind. Working with gifted and ordinary children at Harvard's Project Zero, Gardner intended to "understand the development of human cognitive capacities" (Gardner, 1999, p.31) and proposed a new definition of intelligence: "a biological potential to process information that can be activated in a cultural setting to solve problems or create products that are valued in a culture" (pp. 33-34). Considering differences in time and place, this definition implies that intelligence is not restricted to a particular culture, it can be genetically inherited, developed or improved through education or social environment.

Gardner's theory of multiple intelligences debated the conventional perceptions of intelligence as a general ability that merely considered language and logic capabilities and reported intelligence in the form of a single score defined by IQ tests. Instead of viewing intelligence as a unitary concept, Gardner proposed the possibility of having many different types of intelligences. He argued that,

> *It is fundamentally misleading to think about a single mind, a single intelligence, a single problem-solving capacity. And so, along with many others, the author tried to make the argument that the mind/brain consists of many modules/organs/intelligences, each of which operates according to its own rules in relative autonomy from the others (Gardner, 2003, p.6).*

Initially, Gardner (1983) proposed seven types of intelligences; including verbal/linguistic, logical/mathematical, musical, spatial/visual, bodily/kinesthetic, intrapersonal, and interpersonal intelligence. In 1999, he introduced two more types of intelligences, namely naturalist and existential.

1. Verbal/linguistic intelligence involves well-developed verbal skills in oral and written forms of language.
2. Logical/mathematical intelligence refers to the capacity to solve problems, use numbers effectively, understanding cause and effect relationship and recognizing patterns.
3. Musical intelligence refers to the ability to recognize rhythm, pitch, melody, and musical composition and performance (Gardner, 1999).
4. Spatial/visual intelligence corresponds to all aspects of spatial and graphical information, including

drawing, painting, visual arts, architecture, navigation, and having well developed mental images.

5. Bodily/kinesthetic intelligence involves the ability to use one's body movement and body language to convey feelings and create things.
6. Intrapersonal intelligence is the ability to understand one's feelings, fears and motivations; i.e., self-awareness.
7. Interpersonal intelligence is the ability to understand and respond to other persons' feelings, emotions, attitudes and intentions effectively.
8. Naturalist intelligence deals with sensitivity to nature and environment; this is the capacity to recognize and categorize various kinds of living species.
9. Existential intelligence refers to the capacity and sensitivity to ultimate issues regarding the existence of human beings, significance and meaning of life and death.

Even though Gardner introduced existential intelligence in his book, Intelligence Reformed (1999, pp.60-66) he does not confirm it as the ninth intelligence (Botelho, 2003). Gardner (1999) asserted that,

> *Despite the attractiveness of a ninth intelligence, however, I am not adding existential intelligence to the list. I find the phenomenon perplexing enough and the distant from the other intelligences vast enough to dictate prudence- at least for now. At most, Fellini-style, to joke about '8 ½ intelligences (p.66).*

MI theory assumes that all human beings possess all kinds of intelligences, but each person has a unique combination, or profile of these intelligences. This theory regards that intelligences are not static and they can be developed if they are encouraged, enriched, and instructed.

Armstrong (1994) mentioned four key points that educators found attractive about the Gardner's theory of Multiple Intelligences:

- Each person possesses all eight intelligences.
- Intelligences can be developed.
- Intelligences work together in complex ways.
- There are many different ways to be intelligent.

There has been quite a long discussion on the efficacy of using MI theory in language teaching and learning. Since its proposal in 1980s, the theory has had a significant impact on the design of the foreign language curriculum and teaching materials. Many studies have analyzed textbooks in light of MI theory to determine different types of intelligences embedded in their activities. Some of the well-known studies are reviewed as follows:

Botelho (2003) analyzed six ELT textbooks (American Headway 2, Explorations 1, Gateways 1, Go for it! 4, New Interchange 1, and Passages 1) in lights of MI theory in Brazil. The study revealed that verbal/linguistic, intra personal, spatial/visual and interpersonal were the main intelligences embedded in the six books. The less common intelligences were logical/mathematical, bodily/kinesthetic followed by musical, naturalist and existential. Analyzing teachers' perceptions of the application of MI theory in ELT textbooks, she found teachers' awareness and concern in the use of MI-related teaching materials.

Examining the representation of Gardner's theory of Multiple Intelligences in ILI textbooks, Razmjoo and Farmer (2012) evaluated the textbooks taught at the intermediate level of adult and young language learners in this department. The results of the data analysis showed that textbooks predominantly catered for verbal/linguistic, logical/mathematical, visual/spatial intelligence and the least addressed types of intelligences were naturalistic and bodily/kinesthetic. The results of the study also showed a significant difference in the percentage of occurrence of intelligences between the two sets of course books taught at adults and young adults' levels. Since verbal/linguistic intelligence was present in almost all of the activities, Razmjoo and Farmer (2012) claimed that

"this may be the cause of the success of a group of language learners studying these books that are verbally intelligent and also the failure of those who are not intelligent in this way" (p. 183).

Taase (2012) studied the locally published ELT textbooks in

light of MI theory. Using Botelho's (2003) MI checklist, he analyzed three textbooks (grade 1, 2 & 3) used in Iranian educational system in guidance school. According to the findings of the study, verbal/linguistic and visual/spatial intelligences were the most dominant ones followed by logical/mathematical, interpersonal and intrapersonal intelligence. Moreover, no example of musical, bodily/kinesthetic, and naturalistic intelligences was found.

Investigating the representation of multiple intelligence types in Touchstone series coursebooks, Ebadi, Sabzevari, and Beigzadeh (2015) found that verbal/linguistic and spatial/visual intelligence were the most dominant intelligence types. Musical, bodily/kinesthetic, and naturalist intelligences were the least common types embedded in the coursebooks' activities. The results of the study also showed a significant difference between the series' student books and workbooks in terms of multiple intelligences; i.e., student books were more representative of different types of the intelligences than workbooks of the series.

2. Method

2.1 Materials

One series of commonly used TPSOL course books, namely Farsi Biyamuzim (Let's Learn Persian), was used to investigate the representation of MI theory in these textbooks. The series consists of 5 student books and 5 workbooks, and is designed at three levels of beginner, intermediate and advanced levels. Innovation in method of teaching, interesting topics, integrated skills, emphasis on oral and written form of language along with culture and art, authenticity, absence of a mediator language, as well as attractive design are among the major characteristics that made this series of TPSOL course books interesting among the language learners of all ages. Due to these advantages, the series has received great attention and is widely used in Persian language teaching centers in Iran and abroad. These reasons may well justify the choice of Farsi Biyamuzim series for textbook analysis. Since only three textbooks of the series are published in Iran and are available for this study, the present researchers evaluated Book 1, 2, and 3 of this series. Each of these textbooks contain 30 units. For the sake of feasibility of the research, one third of the units, i.e., ten units of each of the textbooks were selected for the textbooks' analysis. More specifically, 3 units from the beginning, 4 units from the middle, and 3 units form the last part of the textbooks were purposefully selected to identify the embedded intelligences.

2.2 Instruments

In order to analyze textbooks, the MI checklist was prepared by the present researchers based on the review of literature (Botelho, 2003; Estaji & Nafisi, 2014; Ibragimova, 2011; Kirgoz, 2010) and theoretical framework of MI theory (Gardner 1983, 1999). This checklist contains definition of the eight intelligences and a matrix of activities for each type of intelligence (Appendix). The designed MI checklist was translated to Persian and was used as a coding scheme for classifying and evaluating the content of textbooks with regard to MI theory.

2.3 Procedure

Reviewing the literature (Botelho, 2003; Estaji & Nafisi, 2014; Ibragimova, 2011; Kirgoz, 2010), the first draft of MI checklist was adapted and designed. After getting an expert opinion from two instructors in the field of applied linguistics, it was revised; i.e., one more section (sample activities) was added to the checklist. In addition, a Persian version of the aforementioned checklist was prepared by the present researchers and was reviewed by the same experts to examine the accuracy and appropriateness of the translations. Following this stage, the designed MI checklist was used to study the representation of MI theory in Farsi Biyamuzim 1, 2, and 3 textbooks. All the activities and exercises in 10 units from each of the three textbooks were carefully analyzed to identify the types of embedded intelligences. In order to identify the appropriate intelligence in each activity, the main procedure was to decide what type or types of intelligences that activity addressed.

For instance,

- Verbal/linguistic intelligence: e.g., write; fill in the blanks with correct form of the verb.

- Logical/mathematical intelligence: e.g., do the puzzle; put the sentences in order.
- Musical intelligence: e.g., listen and chant.
- Spatial/visual: e.g., look at the pictures and draw; trace the lines.
- Bodily/kinesthetic intelligence: e.g., do the role-play; do the actions.
- Intrapersonal intelligence: e.g., write about your family.
- Interpersonal intelligence: e.g., work with your partner, ask and answer the questions.
- Naturalist intelligence: e.g., what's the weather like today?

However, some of the activities involved a mixture of intelligences. For example, the activity like "Look at the picture and tell the story" addressed both visual/spatial and verbal/linguistic intelligences. These types of activities were categorized into more than one intelligence type. Note that basic structure and review sections were not considered. To ensure the reliability of the items presented in the checklist, two raters evaluated the textbooks individually. The correlation coefficient between their ratings ($r = 0.94$) revealed that, the checklist was a reliable instrument to be used in this study. Differences in the remaining percentage of the categories were resolved through discussion.

3. Results

This section presents the results of textbooks evaluation in terms of MI theory. From the three textbooks, thirty units were purposefully selected and analyzed to identify the intelligence types and the activities addressed. Using frequency and percentage, the results of data analysis is summarized in Table 1 and 2.

Table 1 displays the distribution of intelligences in three textbooks of Farsi Biyamuzim series. The result for each textbook is presented as follows:

3.1 Book 1

Ten units were analyzed from this book including units 2, 5, 10, 13, 15, 17, 20, 23, 25, and 27. The total number of the activities involved in these units was 97. As Table 1 shows, verbal/linguistics intelligence was the most frequently used intelligence type that catered for 98.96% of the activities. This means that out of 97 activities, 96 activities addressed verbal/linguistic intelligence. Visual/spatial intelligence was the next most frequently addressed kind of intelligence that made up 39.17% of the activities, indicating that 38 activities catered for this intelligence type. The third widely used intelligence type was logical/mathematical intelligence comprising 35.05% of the activities; i.e., 34 of the analyzed activities addressed logical/mathematical intelligence. Interpersonal (21.64%), intrapersonal (17.52%), musical (5.15%), and naturalist (4.12%) intelligences were the least intelligence types addressed in the activities. No example of bodily/kinesthetic intelligence type was found in book 1 activities.

3.2 Book 2

Ten units were analyzed from this book including units 3, 7, 9, 11, 15, 17, 19, 22, 26, and 28. The total number of the activities involved in these units was 124. According to Table 1, the most dominant type of intelligence was verbal/linguistic intelligence presented in 93.54% of the activities, indicating that from 124 analyzed activities, 116

Text books	Intelligence Types f % Verbal	Spatial	Logical	Interpersonal	Intrapersonal	Musical	Natural	Bodily	Number of Activities
Book1	96	38	34	21	17	5	4	0	97
	98.96	39.17	35.05	21.64	17.52	5.15	4.12	-	
Book2	116	51	40	21	14	7	7	0	124
	93.54	41.12	32.25	16.93	11.29	5.64	5.64	-	
Book3	87	41	31	20	10	10	4	0	106
	82.07	38.67	29.24	18.86	9.43	9.43	3.77	-	

Table 1. Distribution of Intelligences in Farsi Biyamuzim 1, 2 and 3

	Intelligence Types f %								
	Verbal	Spatial	Logical	Interpersonal	Intrapersonal	Musical	Natural	Bodily	No of Activities
Text books	299	130	105	62	41	22	15	0	327
	91.43	39.75	32.11	18.96	12.53	6.72	4.58	-	

Table 2. General Distribution of Intelligences in Textbooks

of them addressed verbal/linguistic intelligence. Visual/spatial intelligence ranked second catering for 41.12% of the activities, followed by logical/mathematical intelligence that accounted for 32.25% of the activities. Interpersonal, intrapersonal, musical, and naturalist were the less common intelligences in the activities analyzed. These intelligence types were presented in 16.93%, 11.29%, 5.64%, and 5.64% of the activities respectively. Note that no example of bodily/kinesthetic intelligence type was found in book 2 activities as well.

3.3 Book 3

Ten units were analyzed from this book including units 1, 4, 8, 12, 14, 16, 18, 21, 24, and 29. The total number of the activities involved in these units was 106. As Table 1 displays, the analyzed activities predominantly catered for verbal/linguistic intelligence with 82.07%, this means that from 106 activities, 87 of them addressed verbal/linguistic intelligence. The next extensively used kind of intelligence was visual/spatial intelligence followed by logical/mathematical intelligence covering 38.67% and 29.24% of the activities respectively. The fourth widely used intelligence was interpersonal comprising 18.86% of the activities. Musical and intrapersonal intelligences equally ranked as the fifth category of intelligence types that catered for 9.43% of the activities. The least commonly addressed type of intelligence was naturalist presented in 3.77% of the activities. No example of bodily/kinesthetic intelligence type was found in activities of book 3 as well. Figure 1 displays distribution of intelligences in three textbooks of Farsi Biyamuzim series.

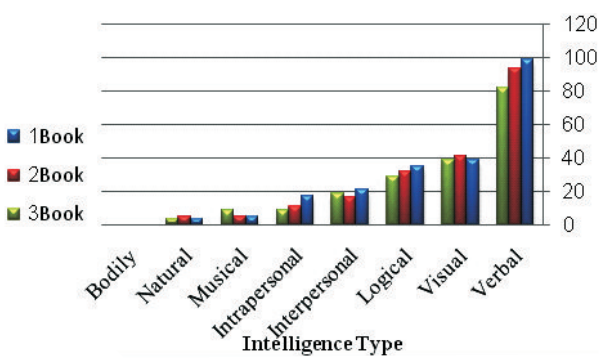

Figure 1. Distribution of Intelligence Types in Farsi Biyamuzim 1, 2 and 3

As Figure1 shows, the intelligence profile of the three textbooks is roughly similar to each other: Verbal/linguistic intelligence is the predominant intelligence type in textbooks followed by visual/spatial, logical/mathematical, and interpersonal intelligences. Intrapersonal, musical, and naturalist intelligences were the least dominant types among three textbooks and bodily/kinesthetic intelligence was particularly absent in the analyzed activities.

The total number of the activities analyzed in Farsi Biyamuzim 1, 2, and 3 was 327. Table 2 displays the general distribution of intelligences in Farsi Biyamuzim series textbooks' activities. According to this table, verbal/linguistic intelligence was the predominant type catering for 91.43% of the overall activities presented in the three textbooks. Visual/spatial (39.75%) and logical/mathematical (32.11%) ranked as the second

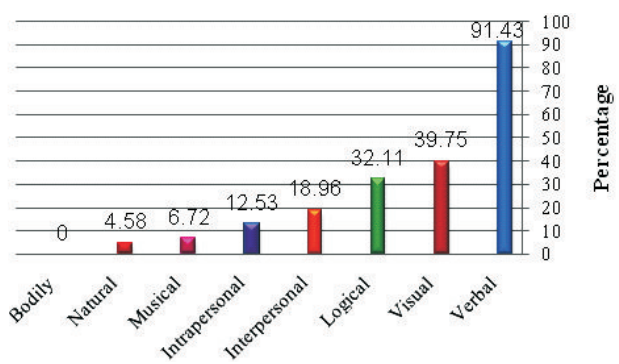

Figure 2. MI Profile of Three Textbooks

	Book1	Book2	Book3
Chi-Square	194.809	246.906	170.345
df	6	6	6
Asymp. Sig.	.000	.000	.000

Table 3. Chi-Square Tests for Each Textbook in Terms of MI Theory

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.842[a]	12	.924
Likelihood Ratio	5.624	12	.934
Linear-by-Linear Association	.045	1	.832
No. of Valid Cases	674		

Table 4. Chi-Square Test for Textbooks' Proficiency Level and Multiple Intelligences

and third widely addressed types of intelligence respectively. Interpersonal (18.96%), intrapersonal (12.53%), musical (6.72%), and naturalist (4.58%) were the less common intelligences found in the analyzed activities.

Figure 2 graphically represent the general distribution of intelligences in the three textbooks of Farsi Biyamuzim series.

The data used in this part of the study are categorical and gathered by counting the frequency of each intelligence type. To be more specific, what we are dealing with is non-parametric type of data. Therefore, Chi-square test as a nonparametric test was run in order to investigate the distribution of intelligence types in three textbooks of Farsi Biyamuzim. The result of the Chi-square tests is represented in Table 3 .

As Table 3 displays, Chi-square test gives us a significant result (Sig=.000) for each of the three textbooks. This means that the distribution of the intelligence types was not equal in the books. In other words, the eight intelligences are not distributed evenly among the books. Therefore, it can be concluded that the differences between the frequencies of occurrence of different intelligence types do not have a specific pattern in the Farsi Biyamuzim series.

In order to investigate the significant effect of textbooks' level on application of multiple intelligences in their activities, Person Chi-Square test was run.

According to Table 4, textbooks' level does not have any significant effect on the application of multiple intelligences (p> .05). This means that the textbooks' MI profile does not change as the level of textbook changes.

4. Discussion

In this section, the results are discussed under the research questions of the study:

4.1 Research Question (1): What types of intelligences are reflected in Farsi Biyamuzim (Let's Learn Persian) series textbooks' activities?

Analysis of this series of textbooks in terms of MI theory, revealed a wide range of distribution of the eight intelligences in textbooks' activities (0 – 91.43%). According to the results, 91.43% of the 327 activities in the three textbooks catered for verbal/linguistic intelligence. This result may be due to the fact that language textbooks mostly involve various activities catering for reading, writing, listening, and speaking skills, as well as vocabulary, and grammar sections designed with the aim of developing the linguistic component. Therefore, the state of verbal/linguistic intelligence as the most dominant intelligence types in textbooks' activities was rather predictable. Moreover, this outcome is in line with the finding of previous studies on textbook evaluation (Botelho, 2003; Estaji & Nafisi, 2014; Ibragimova, 2011; Razmjoo & Famer, 2012) that language textbooks predominantly cater for verbal intelligence.

Visual/spatial intelligence (39.75%) and logical/mathematical intelligence (32.11%) were among the most commonly addressed intelligence types as well. A reasonable justification for the common representation of visual/spatial intelligence is the fact that language textbooks commonly use pictures, graphs, charts, and tables to illustrate different situations presented in dialogues, reading passages, listening activities or vocabulary sections. Moreover, visual illustrations are usually integrated to textbooks' activities to attract language learners' attention and enhance their comprehension. The frequent representation of logical/mathematical intelligence may be due to the fact that language textbooks involve activities such as matching, categorizing, ordering information in a logical sequence, puzzles, and problem solving activities to indulge language learners' mind and stimulate intellectual abilities. This finding is consistent with previous studies (Botelho, 2003; Kirgos, 2010; Tasse, 2012).

Interpersonal intelligence was presented in 18.96% of the analyzed activities. Pair work and group work are among the most common sorts of activities that encourage

interaction among language learners and empower interpersonal intelligence. However, frequency of 18.96% activities in the analyzed textbooks' activities cannot be considered high; therefore, as Ibragimova (2011) had mentioned more group work activities are required to stimulate learners' communicative competence. According to Brown (1995), group work activities provide various situations and affective opportunities through which learners can promote their linguistic interaction and responsibility for their learning.

The least common types of intelligences in analyzed textbooks' activities were intrapersonal, musical, naturalist, and bodily/kinesthetic intelligences. These intelligences were presented in less than 15% of the analyzed textbooks' activities. Intrapersonal intelligence (12.53%) ranked fifth. The analysis of the textbooks revealed a shortage of activities that address the personal opinions and self-evaluation component. Musical intelligence was presented in 6.72% of the activities and ranked sixth. Analyzed activities that addressed musical intelligence involved recognizing stress patterns, pronunciation, and songs. Naturalist intelligence ranked seventh with a low percentage of 4.58% and was identified as the least type of intelligence. There seemed to be little room for activities that referred to the natural phenomena, environment, and living species. Furthermore, none of the analyzed activities covered bodily/kinesthetic intelligence. In fact, one of the important findings of the study was the absence of bodily/kinesthetic intelligence in the analyzed textbooks' MI profile. This finding may be due to the limitations of the present study or a shortcoming in the analyzed textbooks.

Analysis of the textbooks revealed that there was not a balanced distribution of the intelligence types addressed in this series of TPSOL textbooks; i.e., the textbooks have not been designed to incorporate the principles of MI theory in language learners. In the same vein, even in the field of ELT, Botelho (2003) mentioned that textbooks have not been designed to apply the principles of MI theory, but there are resource books that language teachers can use to integrate MI theory to their classroom instruction.

4.2 Research Question (2): Does the level of the textbooks have any significant effect on representation of MI profile?

The results of study revealed that the proficiency level did not have any significant effect on the application of textbooks' MI profile; i.e., the distribution of intelligence types did not significantly change as the level of textbooks changed. To be more specific, the MI profile of each textbook (book 1, 2, and 3) was roughly the same as the general distribution of MI profile. As the results show the frequency of occurrences of verbal/linguistic, logical/mathematical, intrapersonal intelligences was roughly decreased from book 1 to book 3; whereas, musical intelligence was increased. Note that, there is not a specific pattern for occurrence of interpersonal, visual/spatial and naturalist intelligences. However, as Estaji and Nafisi (2014) mentioned, students at elementary level are less proficient at target language; therefore, textbooks mostly involve activities that cater for verbal/linguistic, visual/spatial, bodily/kinesthetic, and musical intelligences. On the other hand, as the students get more proficient and become familiar with the target language, textbooks' activities should cater for logical/mathematical, intrapersonal, interpersonal as well as verbal/linguistic intelligences. In other words, it is supposed that students at higher levels of language proficiency are able to perform more complex cognitive activities.

Conclusion

Pedagogical Implications and Suggestions for Further Researches

In this study, the researchers aimed to evaluate Farsi Biyamuzim (Let's Learn Persian) textbooks in light of MI theory. The results of study revealed that there existed no balance in distribution of different types of intelligence and the analyzed textbooks predominantly addressed verbal/linguistic intelligence. Moreover, a fair percentage of other intelligence types as visual/spatial, logical/mathematical, and interpersonal intelligences were observed. However, the least dominant intelligences were intrapersonal, musical, and naturalist intelligences and no occurrence of bodily/kinesthetic

intelligence was observed in the analyzed textbooks' activities. The result of the study also showed no significant difference relating the effect of textbooks' language proficiency levels on representation of multiple intelligences.

It goes without saying that students have different learning potentials and learning styles that language teachers should be aware of; however, MI theory helps them to teach their students effectively based on individuals' intellectual strengths and weaknesses. Moreover, textbooks should be designed in such a way to address all types of intelligences that students have to speak individual differences and fulfill students' needs. As Botelho (2003) mentioned, it is possible to include the less common intelligence types in one's instruction using different types of activities or supplementing textbooks with extra materials. The main idea is that they can teach anything in many different ways.

This study has the following pedagogical implications for researcher, teachers, and textbooks designers especially in field of teaching Persian to non-Persian speakers.

As opposed to the traditional educational system that highly admired linguistic and logical intelligences, the modern educational system should consider other intelligence types as equally important. Due to individuals' differences and learning styles, it is of crucial importance to consider the students' differences in designing textbooks and developing teaching materials. Accordingly, teachers are required to consider students' MI profile and different learning styles, while choosing the appropriate textbooks to meet their needs. Although, it is not an easy task to cater for the various intelligences that students possess, it is possible to design textbooks in such a way to involve a variety of activities and exercises that presents the same content or concepts in different ways. In other words, students' different needs and MI profile can be met through activities and tasks that comprise as many intelligence types as possible. Even if there is not a balanced distribution of different intelligence types in textbooks, teachers can benefit from supplementary materials to fill the gap.

The interesting result of the study was the total absence of the bodily/kinesthetic intelligence in the analyzed textbooks' activities. Therefore, it is demanding to include this type of intelligence in new editions of this series. To this end, textbooks designers can benefit from sample activities such as introducing the new vocabulary by doing the actions or using gestures and miming; role-plays activities especially in form of conversation; pointing or clapping hands for activities devoted to sound recognition, word pronunciations, etc.

Recommendations

Further studies can be carried out through comparing two series of TPSOL textbooks with regard to Multiple Intelligences theory. Moreover, further researches can investigate application of MI theory through evaluating TPSOL textbooks along with workbooks. Furthermore, teachers' MI profile, their awareness and application of MI theory in language teaching classes need to be investigated in further studies.

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Appendix

MI checklist and sample activities addressing various intelligences as represented in the textbooks

Intelligence Type	Description of Intelligence Type	Types of Activities	Sample Activities
Verbal/linguistic	To use language effectively both in oral and written form	Note taking, reading, listening, speaking, writing, storytelling, discussion, presentation, remembering	Listen and read. Make a sentence with these words. / Complete the sentences. / Rewrite the following sentences. / Fill in the blanks. / Look at the picture and tell the story.
Musical	To recognize musical patterns; sensitivity to pitches, tones, and rhythms	Sing, chant, explaining sound differentiation, reciting poetry, playing musical instruments	Chant the poem of "*Morghe Sahar*" with your friends and teacher/ Circle around the sound of (Š) inthese words.
Bodily/kinesthetic	To use body movements and gestures	Role-play, hands-on activities, point, clap, body language, mime	–
Visual/spatial	To recognize forms, colors, and shapes; to graphically represent visual ideas	Using graphs, tables, slide, map, charts, board, flashcards, movie, painting, mind map, coloring, drawing, using visuals to explain the content, imagining, tracing the lines	Look at the picture of the park and listen to the CD again. Draw and complete the picture. / look at the maps and read the names of the countries / Complete the branches of this tree.
Intrapersonal	To understand one's feelings, fears and motivations; self-awareness	Activities with a self - evaluation component, personal journal keeping, individual questions	Which season do you like most? Why? Tell your friend / What do you like about the park in your neighborhood?/ Tell your friends what you have for New Year's Eve dinner. Do you know how to cook?
Interpersonal	To understand people's intentions, feelings and motives; to work well with people	Classroom discussions, group work, pair work, peer tutoring	Work with your partner. Ask about Melat Park / Discuss with your partner about the above text / Do the conversation with your friend / Talk with your friends about Brazil or USA soccer team.
Logical/mathematical	To use numbers effectively; to detect abstract patterns; to analyze problems and reason well; critical thinking	Unscrambling the sentences, putting the sentences in order, categorizing information in a logical sequence, comparing the answers with a partner, brainstorming, puzzles and	Order the following conversation / Listen and correct the answers / Which sentence is correct and which one is not correct? / Which word is different from the others? / Write

		games, problem solving, number sequences, creating connection between differentideas, crossword, ordering, matching, classifying, sequencing events in a story, identifying errors, identifying main ideas	the number ofeach sentence next to the relevant picture / Categorize the following words / Compare the pictures and answer the questions / Think and say.
Naturalist	To recognize and classify plants, animals, and living species; sensitivity to nature	Topics on natural phenomena, classifying items (e.g., animals, plants, etc.)	Talk about the seasons' characteristics / Look at the pictures and describe the rainfall process. .

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