On the Representation of Multiple Intelligence Types in the ILI Intermediate Coursebooks: A Coursebook Evaluation

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Abstract

This study aims at evaluating the coursebooks taught at the intermediate level of adult and young adult departments of the Iran Language Institute in terms of multiple intelligence types introduced by Gardner (1983) to see to what extent such coursebooks represent the Multiple Intelligence Theory. To fulfill the objectives, a checklist developed by Botelho (2003) and localized by the researchers on the basis of this theory was used. The coursebooks were analyzed according to this checklist and the frequencies and percentages of occurrence of each type of intelligence were calculated. The results of the study showed that verbal/linguistic, logical/mathematical and visual/spatial types of intelligence were the most dominant intelligence types in the analyzed coursebooks. Naturalistic and bodily/kinesthetic types of intelligence were the least common types represented in the coursebooks. A comparison was also made between the coursebooks taught to adults and young adults at the Iran Language Institute and the results presented a significant difference between the percentage of occurrence of logical/mathematical, bodily/kinesthetic, visual/spatial, intrapersonal and musical types of intelligence between the two sets of coursebooks. On the other hand, the difference between the percentage of occurrence of verbal/linguistic, interpersonal and naturalistic types of intelligence was not significant.

Keywords: Multiple Intelligences, Coursebooks, Coursebook Evaluation, Content Analysis, ILI System

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1. Introduction

Many students struggle with the lecture method and multiple choice tests used in the classrooms. They are able to rehearse facts and figures presented within the courses but fail to form a conceptual understanding of the material and therefore, perform poorly when it comes to applying what they have learned. As Gardner (1983) put it, “we should spend less time ranking children and more time helping them to identify their natural competencies and gifts and cultivate these. There are hundreds and hundreds of ways to succeed and many, many different abilities that will help you getting there” (p.37). There are many ways to succeed and there are many different ways to learn. Paying attention to the individualism which each student brings to the classroom and helping each student grow in his own unique way is the very basis of Gardner's multiple intelligence theory (MIT).

In the 1980s, Gardner revolutionized the educational world with his ground-breaking book, namely, *Frames of Mind* (Gardner, 1983) which revealed the possibility of many different intelligence types instead of one single intelligence type. This theory challenged the way society viewed intelligence, and it challenged teachers' attitudes with regard to their teaching. In this way, educators started considering the possibility that learning may be more complex and interesting than was previously thought.

Gardner coined the phrase “multiple intelligences” (MI) that triggered a shift of paradigm in education. The one-size-fits-all curriculum which the educational world had become accustomed to did not appear so appropriate after the scholars of this field understood that MIT suggested that all human beings have different and unique intelligences with strengths and weaknesses (Gilman, 2001). Gardner (1983) concluded that there are eight intelligences as the following: Verbal-Linguistic Intelligence, Logical-Mathematical
Intelligence, Visual-Spatial Intelligence, Musical Intelligence, Bodily–Kinesthetic Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence (Gardner & Hatch, 1989, p. 84). Gardner also thinks of adding other intelligences, which are existential, spiritual and moral (Latham, 1997).

Results of scientific studies have shown that MIT can be applied to classroom and schools situations (Gardner & Moran, 2006). Findings have proven that the overall performance of the schools that use MI showed a significant gain in Scholastic Assessment Test (SAT) scores, overall parental involvement, and a gradual decline in discipline issues in the schools (Smith, 2002). Therefore, it can be said that teaching approaches based on multiple intelligences theory may create positive changes in students’ successes and attitudes towards the lesson (Korkmaz, 2001; Chan, 2003).

In the same direction, As Riazi (2003) mentioned, textbooks (coursebooks) play a very crucial role in the realm of language teaching and learning and are considered the next important factor in the expanding circle the teacher (Riazi, 2003, p. 52). Accordingly including MI types in them is an important issue to be considered by the authorities. What the researchers want to do in this study is to evaluate the Iran Language Institute (ILI) coursebooks with regard to Gardner’s theory of multiple intelligences so that those responsible would revise them in the way to accommodate the needs and differences of the learners. As such, the researchers are going to study the coursebooks written and taught at the Iran Language Institute to examine the extent to which these coursebooks represent the theory of multiple intelligences. The study also meant to explore the differences between coursebooks taught at the young adult and adult levels with regard to the frequency of each intelligence.
1.1. Objectives of the Study and Research Questions

The objective of this study is to evaluate how the Iran Language Institute’s coursebooks correspond to Multiple Intelligence Theory and to what extent they tap the intelligences in the activities appearing in the coursebooks. As the practitioners of the Iran Language Institute, the researchers always observed the failure of so many students in learning English in this language institute and the reason they always gave was the difficult and monotonous materials which, in fact, did not match the intelligences they enjoyed. This weak point is still observed despite the various revisions made in the coursebooks recently. In line with the objectives mentioned above, the following research questions are raised:

1. To what extent do the coursebooks currently used at the Iran Language Institute represent the MI types in their activities?
2. To which intelligence type more attention is paid?
3. Is there any difference between the coursebooks used in adult and young adult sections of the ILI with regard to representation of MI types?

2. Literature Review

In this part the concept of intelligence, then challenges to the concept, recent studies conducted in this area, the importance of textbook in language teaching, the studies conducted in the field of coursebooks evaluation are reviewed.

2.1. The Concept of Intelligence (Intelligence Test)

The European scientific community initiated its studies of intelligence with the publication of Sir Francis Galton’s book, namely, Hereditary Genius, in 1869.
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A century later, Alfred Binet (1969) developed a scale or test that provided him with school achievement indicators. He then worked on devising a curriculum that would assist the dull students in raising their mental age or abilities.

At Stanford University, Lewis Terman utilized the English translations of the Binet scales to develop the Stanford-Binet Intelligence test. Terman (1916) developed a new method of scoring which required a calculation of the ratio between mental and chronological age which is then multiplied by 100 arriving at an “intelligence quotient” or IQ, a fixed and unitary quantity. Terman admired the work of Galton, and his respect toward hereditary (“nature”) indicators of intelligence influenced the design of his longitudinal studies on gifted children. The major critique of the study is the sample: 1,500 boys and girls with IQ scores above 130 from the 1920s through 1955 and all from middle-class white families, although other diverse populations were available for the study. This exclusion in Terman’s research and in the field’s reliance upon a single score intelligence quotient or “IQ” score, prompted researchers to investigate the environmental factors (nurture) of intelligence.

2.2. Challenges to IQ

In 1938, psychologist Thurstone challenged the single-score concept of intelligence and introduced intelligence as comprised of seven “primary mental abilities”: verbal comprehension, word fluency, number facility, spatial visualization, associative memory, perceptual speed, and reasoning.

The IQ score neglected to notice these independent aspects of intelligence. The “Structure of the Intellect” construct developed by psychologist, Guilford (1940), enlarged upon Thurstone's (1938) projects and he differentiated and classified 80 distinct factors of intelligence. His work illustrates the complex nature of intelligence that criticizes the reliability of the Stanford-Binet
measurement of intelligence as a quantifiable element.

2.3. Gardner’s Theory of Multiple Intelligences

Gardner (1993), as an educational theorist, felt that learning should be learner-centered and a constructivist activity. He grounded his theory on the analysis of empirically reviewed research data in biology, neuropsychology, developmental psychology, and cultural anthropology (Chen, 2004). MI theory states that there are eight different, distinct intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, naturalistic, interpersonal, and intrapersonal. According to Gardner, the Multiple Intelligences theory better accounts for the cognitive functions of some populations than intelligence defined by IQ tests. He argued that human intelligence is not a general ability; rather, it is a biopsychological potential with an emergent, responsive, and pluralistic nature. MI theory also explains the diverse abilities required to succeed in different professions in a better way.

Although many psychologists do not support the theory of multiple intelligences (since they agree with psychometric view of intelligence), many educators agree with Gardner’s view of intelligence and use MI in their teaching. Several examples confirm the consideration of MI in education and some educators have analyzed the application of MI all around the world and specifically in the area of language learning.

Literature shows so many recent works done on different domains of Multiple Intelligence theory. The typical studies done in this regard are as follows: Tahriri and Yamini (2010), Razmjoo, Sahragard and Sadri (2009), Kim (2009), Hosier (2009), Xie and Lin, O’Connell (2009), Svenningsen (2009), Salas (2009), Sözen, Sözen and Tekat (2009), Baragona (2009), Massalski (2009), Stewart-lies (2009), King (2009), Serin, Yavuz and
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2.4. Coursebooks and Multiple Intelligences

Since the objective of the present study is to evaluate one of the coursebooks used in Iranian language institutes in order to know how their activities can help language learners enhance their intelligences, there is a need to evaluate the coursebooks of the ILI in Iran. Tok (2010), Sznajder (2010), Sahragard, Rahimi and Zaremoayyedi (2009), Al-Madany (2009), Mustapha (2008), Razmjoo (2007), Paxton (2007), Aytug (2007), Mukundan (2007), Dominguez (2003), Ansary and Babai (2002), Yakhontova (2001), Gorsuch (2001), Richards (2001) and Sunderland, Cowley, Abdul Rahim, Leontzakou and Shattuck (2001) are the local and overseas studies done in this respect. However, some researchers have evaluated coursebooks in the light of multiple intelligence theory including Kirkgöz (2010), Alghazo, Obeidat, Al-trawneh and Alshraideh (2009), Botelho (2003), Snider (2001).

In line with such different and important studies done in the areas of multiple intelligences and coursebooks evaluation in the inner and outer circles, the researchers addressed the gap by evaluating one of the English coursebooks in the expanding circle.

3. Method

As mentioned before, the objective of this study is to analyze the current coursebooks taught at the Iran Language Institute in order to see whether they correspond to MI theory, and to what extent they represent MI types and also
the degree they engage learners in MI.

In this section, the materials and the theoretical framework, as well as the instruments used for data collection and the procedure through which the data were collected and analyzed are discussed.

3.1. Materials

The coursebooks chosen for this study are those used at the intermediate levels at adult and young adult sections of the ILI. The intermediate level was chosen because the number of coursebooks covered in it was larger and they were good representatives of the coursebooks of other levels. At the young adult intermediate section which includes four levels (Race 1, 2, 3, 4) two coursebooks are taught with the names of *English Time 3* and *English Time 4* by Rivers and Toyama (2002).

At the intermediate adult section of this institute which consists of nine levels (pre-intermediate 1, 2, 3; intermediate 1, 2, 3; and high-intermediate 1, 2, 3) nine coursebooks are used that are compiled by Research and Planning Department of the Iran Language Institute in Iran (2004).

These coursebooks are not taught in any other language institute in Iran. They were chosen in order to provide information about the application of MI in the biggest language institute in Iran and they were analyzed to see if MI theory is reflected in them and also to identify the intelligence profile of the coursebooks. The researchers identified which intelligences were included, which intelligences were predominant, and which ones were less common or even not included. The difference between the intelligence profile of the coursebooks taught at the adult section and young adult section was also determined.
3.2. Instrument

A checklist prepared and used by Botelho (2003) was used to analyze the tasks and the exercises of the chosen coursebooks. She created this checklist based on several sources (Christison, 1996; Christison & Kennedy, 1999; Palburg, 2001). The intelligences included in each activity are analyzed according to the description of each intelligence type in this checklist and also the classification of activities included in it.

3.3. Theoretical Framework

Gardner’s (1983) theory of multiple intelligences proposes a means to understanding the many ways in which human beings are intelligent; that is, how we process, learn, and remember information, in contrast to the old notions of intelligence testing, which hypothesized a general, all-encompassing general intelligence. Gardner (1983) states that while individuals are capable of processing information in at least seven different ways, each individual varies in the degree of skill possessed in each of these intelligences.

Gardner’s (1983) theory of multiple intelligences is not based upon binary attributes--either linguistic or logical-mathematical, as expressed in the IQ test formula prescribed by Binet (1916) and Binet and Simon (1916) and his supporters. However, Gardner believes that individuals may rely more heavily on one intelligence type over another. Accordingly, foreign language teachers may help students learn better by tapping into one or more of the intelligences that an individual student might use dominantly.

3.4. Data Collection and Analysis Procedure

For the sake of feasibility of the study, two units of each of the eleven
coursebooks chosen for this study were selected randomly to be evaluated. They were analyzed by identifying the intelligences included in each activity. Each unit is divided into different parts that are clearly labeled. These parts which are called activities in this study are almost the same for all of the coursebooks. The authors of these books have tried to include the four language skills (reading, writing, speaking and listening) as well as vocabulary, grammar and pronunciation practices almost in each unit. Sometimes an activity includes a combination of more than one skill. For instance in the High-intermediate 3 course book (unit 9, activity 7), students have to read some sentences first and score them according to their own beliefs. After that they should discuss their answers in groups of four or five. As it is seen, both reading and speaking skills of the students are practiced in this activity and different intelligence types are also included such as intrapersonal, interpersonal and verbal.

To identify the intelligences in each activity, a checklist was used in which a list of possible activities and techniques used in language teaching and also a description of each intelligence were available. Each intelligence type was assigned a label so that identifying the type of it in the activities was easier and these labels were used again in figures and tables. The labels are as follows: V/L for verbal/linguistic; L/M for logical/mathematical; S/V for spatial/visual; B/K for bodily/kinesthetic; M for musical; IR for interpersonal; IA for intrapersonal; and N for naturalistic.

After identifying the intelligence types of each activity, the frequency of each intelligence type was counted for each unit. A table was created for each coursebooks in which the results were incorporated. As two units of each book were analyzed, the number of activities per book and the number of intelligence types per book were summed in the tables, too. The results
obtained include the total number of activities, the sum of occurrences of each intelligence type, and the percentage of the occurrence of each intelligence type in all books. The results also represent the profile of the eleven coursebooks analyzed in the present study.

The analysis for this study was limited to simply recognizing or categorizing which intelligences were included in the activities. There were some elements taken into consideration in identifying the intelligences of each activity: the type and description of the activity, the elements that were part of the activity (such as pictures and graphs), and the skills being practiced. Three Chi-Square tests were also run in order to examine the distribution of the intelligence types in adult books, in young adult books and also the difference between adult and young adult books.

4. Results and Discussion

The coursebooks currently used at the intermediate level of the ILT are analyzed in order to identify the intelligence types included in them. Coursebooks’ intelligence profiles are prepared and the extent to which they represent the MI theory is determined. A comparison is also made between the books taught to adults and young adults at the ILI. Chi-Square test is also run to check the distribution of the intelligence types.

None of these books were intended to incorporate the principles of MI theory in language learners. As Botlho (2003) claims, no ELT coursebook has been designed to apply MI theory but language teachers can resort to some resource books to apply MI to their teaching.

First, the results from the analysis of each coursebook of adult and young adult sections will be presented separately and a comparison is made between the books taught to adults and young adults at the ILI. Finally the intelligence
profile of all coursebooks will be discussed generally. The results are also compared to the findings of some recent studies.

4.1. Coursebooks Intelligence Profile

In this part the profile of each coursebooks analyzed for this study are presented and discussed. At first, the books of adult section are presented from the lowest level which is pre-intermediate one and after the analysis of the nine adults’ books the profile of the two young adults’ books are presented and discussed, too.

4.1.1. Adult Coursebooks Intelligence Profile

The first book presented here is Student Book: Pre-Intermediate 1. Table 1 summarizes the number of occurrences and percentages of each intelligence type in the two units selected from book 1.

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>46</td>
<td>21</td>
<td>20</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td>100%</td>
<td>45.65%</td>
<td>43.47%</td>
<td>4.34%</td>
<td>17.39%</td>
<td>6.52%</td>
<td>0%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

The intelligence profile of the two units selected from this book includes all the 46 activities of them and almost follows the general textbook profile in the way that all exercises included verbal/linguistic intelligence type in one way or another and also the predominant intelligences are logical/mathematical and spatial/visual types with logical/mathematical intelligence including 45.65% and spatial/visual, 43.47% of all the activities (see Table 1).

The less commonly represented intelligence types in this book are naturalistic (0%) and intrapersonal (0%); bodily/kinesthetic (34%) and interpersonal 96.52%). As just mentioned, there was no activity found which
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catered to naturalistic or intrapersonal types of intelligence in one way or another. Musical intelligence was also present in only 17.39% of the activities. As it can be observed, the pattern exactly follows the general coursebook profile (Table 14) with only a minute difference in logical/mathematical intelligence ranking higher than spatial/visual intelligence with only a 2.18% difference.

The second book profile belongs to Student Book: Pre-Intermediate 2 as presented in Table 2.

<table>
<thead>
<tr>
<th>Ms</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>46</td>
<td>21</td>
<td>18</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>45.65%</td>
<td>39.13%</td>
<td>8.69%</td>
<td>17.39%</td>
<td>2.17%</td>
<td>2.17%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

This table shows roughly the same results as the general coursebook profile (Table 14) in terms of predominant and less common types of intelligence. However, some small differences in the percentages of some of the intelligences were observed. For instance, like the first book profile spatial/visual type of intelligence ranked lower than logical/mathematical intelligence which was vice-versa for the general coursebook profile. The percentage of occurrence of spatial/visual intelligence was 39.13% and for logical/mathematical type it was 45.65% (see Table 2).

The results of other intelligences were almost the same as the results obtained for the first book. In contrast to the first book, in this book, intrapersonal type of intelligence is not absent although its percentage is very low (2.17%).

The next book which will be discussed here is Student Book: Pre-Intermediate 3 as presented in Table 3.
In the profile of this book again verbal/linguistic type of intelligence occurs in 100% of the activities and naturalistic type in 0% of them (see Table 3). In this book the same pattern as the first and second books is observed. 45.65% of the activities analyzed in this study cater to logical/mathematical type of intelligence and 39.13% to spatial/visual intelligence. The percentage of logical/mathematical type was 43.86% and that of spatial/visual type, 47.78% for the general coursebook profile (Table 14). On the one hand, the percentage for the logical/mathematical intelligence in general coursebook profile was smaller than that of spatial/visual intelligence type, which is vice versa for this book, and on the other hand when comparing the results for these two intelligence types the researchers notice that the percentage of spatial/visual intelligence is visibly reduced for the third book while the change in the percentage of logical/mathematical type of intelligence is not so high.

Table 4 summarizes the results obtained from the profile of Student Book: Intermediate 1.

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>46</td>
<td>19</td>
<td>18</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>41.30</td>
<td>39.13%</td>
<td>2.17%</td>
<td>17.39%</td>
<td>8.69%</td>
<td>2.17%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

It can be noticed that as the level of learners has changed from pre-intermediate to intermediate, the percentage of logical/mathematical intelligence type has increased (52.27% for this book, 43.86% for the general coursebook profile) while the percentage of the occurrence of spatial/visual intelligence has decreased (29.54% for this book and 47.78% for the general
coursebook profile). There is no bodily/kinesthetic intelligence observed in the activities analyzed here but the percentage of the occurrence of intrapersonal has increased to 13.63% which is higher than that of general coursebook profile (6.26) (Table 14). Table 5 presents the profile of Student Book: Intermediate 2.

**Table 5. Book 5 -Intermediate 2**

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>45</td>
<td>23</td>
<td>17</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>51.11%</td>
<td>37.77%</td>
<td>0%</td>
<td>17.77%</td>
<td>17.77%</td>
<td>8.88%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

The profile of this book shows almost the same pattern as the previous book regarding the increase in percentages of logical/mathematical and intrapersonal intelligences and the decrease in the percentage of the occurrence of spatial/visual intelligence (see Table 5). 51.11% of the activities analyzed in this unit cater to logical/mathematical type of intelligence while only 37.77% of them cater to spatial/visual type. The percentage of occurrence of the interpersonal intelligence in this book is 17.77% which is a little higher than that of the general coursebook profile (Table 14). Again, no activity found which develops bodily/kinesthetic and naturalistic types of intelligence but 100% of the activities include verbal/linguistic intelligence.

The next book profile belongs to Student Book: Intermediate 3 in which the same pattern is roughly observed as introduced in Table 6.

**Table 6. Book 6- Intermediate 3**

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>44</td>
<td>24</td>
<td>21</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>54.54%</td>
<td>47.72%</td>
<td>0%</td>
<td>18.18%</td>
<td>20.45%</td>
<td>9.09%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

No natural or bodily/kinesthetic intelligence types were observed in the exercises studied for this level and 100% of the activities represent verbal/linguistic intelligence type. A growth is observed in the percentage of the

167
occurrence of logical/mathematical intelligence type which is 54.54% and is almost 10% higher than that of general coursebook profile (Table 14). 47.72% of activities cater to spatial/visual intelligence type which is almost identical to the percentage of general coursebook profile that is 47.78%.

The seventh coursebook analyzed is Student Book: High-Intermediate 1 as presented in Table 7.

Table 7. Book 7-High-Intermediate 1

<table>
<thead>
<tr>
<th>Mls</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>15</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>66.66%</td>
<td>40%</td>
<td>6.66%</td>
<td>33.33%</td>
<td>26.66%</td>
<td>6.66%</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

There is no radical change in the percentages obtained from this book compared to the previous books (Table 7). The only difference is in the percentage of logical/mathematical type of intelligence which has increased to 66.66%. This might be due to the fact that the book is developed for the learners with higher level of language proficiency. In this book again the percentage of the activities that address spatial/visual intelligence (40%) is lower than that of logical/mathematical intelligence (66.66%). This is in contrast with the data obtained from the general coursebook profile (47.78% for the former and 43.86% for the latter). The number of activities that cater to interpersonal type is 26.66% which is higher than the average percentage in the general coursebook profile (Table 14). This also can be the result of a higher level of language proficiency. Table 8 summarizes the data obtained from the analysis of Student Book: High-Intermediate 2.

Table 8. Book 8-High-Intermediate 2

<table>
<thead>
<tr>
<th>Mls</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>16</td>
<td>11</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>68.75%</td>
<td>43.75%</td>
<td>0%</td>
<td>25%</td>
<td>25%</td>
<td>18.75%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

This book follows the same pattern as the previous books and no change is
observed in its profile. 100% of the activities in this book analyzed for this level represent verbal/linguistic intelligence and 0% of them include naturalistic or bodily/kinesthetic types of intelligence (Table 8). The percentage belonging to logical/mathematical intelligence type has a slight growth which is 68.75%. A rise is observed in the percentage of intrapersonal intelligence, too. It has reached 18.75% that may be due to the high level of language proficiency of the learners.

Student Book: High-Intermediate 3 is the last book of adult series which is going to be analyzed here. To see more details about the profile of this book see Table 9 below.

**Table 9. Book 9-High-Intermediate 3**

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>19</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>47.36%</td>
<td>26.31%</td>
<td>12.5%</td>
<td>26.31%</td>
<td>26.31%</td>
<td>21.05%</td>
<td>0%</td>
<td>-</td>
</tr>
</tbody>
</table>

The new points to be discussed about this book are as follows. The percentage of activities catering to logical/mathematical intelligence has decreased and approached the percentage of the general coursebook profile (Table 14). A reduction is also observed in the number of activities including spatial/visual type of intelligence which is 26.31%. This makes the present book rank lower than the general coursebook profile with regard to this intelligence type. 26.31% of the activities cater to musical type which is almost the same as the 28.19% of the general coursebook profile for this intelligence type. This book even has a higher percentage for bodily/kinesthetic intelligence compared to the general coursebook profile (12.5% for the former and 7.83% for the latter). 26.31% of the activities in this book address intrapersonal type. This is again much higher than the 6.26% of the general coursebook profile. Regarding interpersonal intelligence type, there is no radical change in the percentage of the activities of this book catering to it from the previous book;
however, it is higher than that of the general coursebook profile.

Figure 1 below summarizes the data obtained from the analysis of all adults’ books.

![Figure 1. Adults’ Books Profile](chart)

As it is observed in this figure, 100% of the 321 activities of these books represent verbal/linguistic type of intelligence. Logical/mathematical type is observed in 50.15% and spatial/visual intelligence in 38.94% of all of them. It seems that these books are not so much visual. Musical intelligence stands next in the ranking as it is catered in 19.31% of the activities. Interpersonal intelligence which is included in 14.01% of all the activities stands below musical one and higher than intrapersonal intelligence with only 7.47% of the activities catering to it. Among all the 321 activities of the adults’ books, just 3.11% enhanced bodily/kinesthetic type of intelligence which is really a low percentage and as it can be seen, naturalistic type was absent in all of them.

The data used in this study are categorical and gathered by counting the frequency of the occurrence of each type of intelligence. In other words we are dealing with non-parametric data. Therefore, a chi-square test was run in order to see how the intelligence types were distributed in adult books analyzed in this part of the study. The results of this test are presented in Table 10 below:
On the Representation of Multiple Intelligence Types…

Table 10. Chi-square Test for Adult Books

<table>
<thead>
<tr>
<th></th>
<th>Adult books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>27.943</td>
</tr>
<tr>
<td>df</td>
<td>5</td>
</tr>
<tr>
<td>Asymp. sig</td>
<td>.000</td>
</tr>
</tbody>
</table>

As indicated in Table 10 above, chi-square test gives us a significant result (Sig.=.000) in adult books. It means that the distribution of intelligence types was not equal in the books. In other words, different types of intelligence are not distributed evenly in the adult books. It can be concluded that the differences between the frequencies of occurrence of different intelligence types do not have a specific pattern in the ILI adult books.

4.1.2. Young Adult Books Intelligence Profile

English Time one is the tenth book (the first young adults’ book) analyzed and discussed. For more information on the profile of this book refer to Table 11 below.

11. Book 10- English Time 1

<table>
<thead>
<tr>
<th>MIs</th>
<th>VL</th>
<th>VL</th>
<th>VL</th>
<th>BK</th>
<th>M</th>
<th>IR</th>
<th>IA</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>32</td>
<td>5</td>
<td>30</td>
<td>10</td>
<td>24</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>0%</td>
<td>100%</td>
<td>15.62%</td>
<td>93.75%</td>
<td>31.25%</td>
<td>75%</td>
<td>18.75%</td>
<td>0%</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

This book is one of the two books selected from young adult section of the ILI for the present study. A great number of differences is observed between the present book and the previous ones as this is taught to young adults in contrast to the previous books which are taught to adults. The difference between these two groups will be discussed in the next section. A great difference is observed between the intelligence profile of this book and the general coursebook profile (Table 14) but what remains unchanged from one
book to the other, among the books analyzed here, is the percentage of the activities that cater to verbal/linguistic intelligence type which is 100% in all of them and the percentage of the occurrence of naturalistic intelligence type in the activities of each and every book that is 0%. In the profile of this book (Table 11), only 15.62% of the activities represent logical/mathematical intelligence which is 43.86% for the general coursebook profile. This reduction may be due to the age of the language learners which may also be the reason for the great increase in the percentage of spatial/visual intelligence type (93.75%) from the general coursebook profile (47.78%). As the results show, this book is highly visual. An increase in the percentage of the activities catering to bodily/kinesthetic and musical intelligence types is visible, too. The percentage of the occurrence of bodily/kinesthetic type of intelligence for the general coursebook profile is 7.83% while it is 31.25% in this book.

In the general coursebook profile, 28.19% of the activities address the musical intelligence but here 75% of them cater to this intelligence type. This may be again the result of the age of the language learners. The percentage of the occurrence of the interpersonal intelligence type is also slightly above the average for the average being 14.88% and here 18.75% of the activities. Regarding the intrapersonal intelligence, there is no activity catering to it in this book, so its percentage of occurrence is 0%, too.

The last book which will be discussed in this study is *English Time two*. Table 12 summarizes the data obtained from the analysis of this book.

<table>
<thead>
<tr>
<th>Table 12. Book 11- English Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MIs</strong></td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
</tr>
</tbody>
</table>

This book is also taught to the young adults. The pattern of the profile of
On the Representation of Multiple Intelligence Types…

this book is much similar to the previous book. Intrapersonal and natural intelligences are absent in all of the activities analyzed here and 100% of them represent verbal/linguistic intelligence type (Table 12). Visual/spatial intelligence scores much higher in this book’s profile than in the general coursebook profile (93.33% in the former and 47.78% in the latter). The percentage of the activities catering to the logical/mathematical intelligence type is even lower than the previous book. Here it is only 6.66% but in the general coursebook profile it is 43.86%. The percentage of activities including the bodily/kinesthetic and musical intelligence types is again higher than that of the general coursebook profile. 33.33% of the activities analyzed in this book develop the bodily/kinesthetic intelligence and 73.33% of them the musical intelligence. In this book, 20% of the activities cater to the interpersonal intelligence. Figure 2 summarizes the two tables of young adults’ books discussed above.

Figure 2. Young Adults’ Books Profile

The percentage of the activities addressing verbal/linguistic and naturalistic types of intelligence is exactly the same as that of adults’ books which is 100% for the former and 0% for the latter. 93.54% of the activities in these two books
cater to spatial/visual intelligence which shows the importance of visual input in them. The next intelligence type is musical type which is represented in 74.19% of all activities. Bodily/kinesthetic intelligence is observed in 32.25% of the activities and the interpersonal intelligence type in 19.35% of them. 11.29% of all the activities analyzed cater to logical/mathematical intelligence but none of them includes the intrapersonal type.

The data used in this study are categorical and non-parametric. Therefore, a chi-square test was run in order to see how the intelligence types were distributed in young adult books analyzed in this part of the study. The results of this test are presented in Table 13 below:

<table>
<thead>
<tr>
<th>Table 13. Chi-square Test for Young Adult Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
</tr>
<tr>
<td>22.057</td>
</tr>
</tbody>
</table>

As indicated in Table 13, chi-square test gives us a significant result (Sig. = .001) in young adult books. It means that the distribution of intelligence types was not equal in the books. In other words, different types of intelligence are not distributed evenly in the adult books. It can be concluded that the differences between the frequencies of occurrence of different intelligence types do not have a specific pattern in the ILI young adult books.

4.2. The Profile of the Books for Adults and Young Adults

In this part a comparison is made between the books taught to adults and those taught to young adults at the ILI. Nine coursebooks which are taught at the adult intermediate section and two textbooks taught at young adult intermediate section of the ILI are analyzed in the present study. The units selected from adults’ books include 321 activities in all and those from young
adult’ section include 62 activities. For more details regarding the profile of these two groups of books see Figure 3.

**Figure 3. The Profile of Adult and Young Adult Books**

As Figure 3 clearly shows, there are lots of differences between them but what remains unchanged in both sets of books is that 100% of the activities in all of the books belonging to both levels cater to verbal/linguistic intelligence and 0% of them cater to the naturalistic intelligence. Regarding other intelligence types the two groups are completely different. In adults’ books 50.15% of the activities represent the logical/mathematical intelligence but in young adults’ books only 11.29% do so. 38.94% of the activities in adults’ books enhance the visual/spatial intelligence but for young adults’ books it is 93.54%. The percentage of the activities including the bodily/kinesthetic intelligence in adults’ books is only 3.11% but in young adults’ books it is 32.25% of all the activities. A great difference is also observed in the percentages of the occurrence of musical intelligence; that is, 19.31% for adults’ books and 74.19% for young adults’ books. The dissimilarity between the two sets of books for the interpersonal intelligence is not so much big. 14.01% of the
activities in adults’ books and 19.35% of them in young adults’ books cater to this intelligence type. The intrapersonal intelligence is absent in young adults’ books but 7.4% of the activities analyzed in adults’ books address this intelligence type.

4.3. Coursebook Intelligence Profile

To answer the first research question which sought to identify the extent to which the coursebooks presently used at the Iran Language Institute represent the MI types, coursebooks intelligence profile was prepared which refers to the combination of intelligences in the coursebooks. Eleven coursebooks consisting of 383 activities were analyzed in order to identify the intelligences in each activity in the coursebooks (Table 14). An example for each intelligence type from the eleven coursebooks analyzed is also provided in same Table. The occurrence of each activity was counted and the percentage of it for each intelligence type was calculated, too. Figure 4 summarizes the percentage of occurrence of each activity in the eleven coursebooks analyzed.

Table 14. Frequency and Percentage of Each Intelligence

<table>
<thead>
<tr>
<th>Multiple Intelligences</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Sample Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal/Linguistic (VL)</td>
<td>383</td>
<td>100</td>
<td>All exercises</td>
</tr>
<tr>
<td>Logical/Mathematical (LM)</td>
<td>168</td>
<td>43.86</td>
<td>Student’s Book: Intermediate 3(2004f, p. 115) Think &amp; Talk</td>
</tr>
<tr>
<td>Spatial/Visual (SV)</td>
<td>183</td>
<td>47.78</td>
<td>Existence of photos etc.</td>
</tr>
<tr>
<td>Bodily/Kinesthetic (BK)</td>
<td>30</td>
<td>7.83</td>
<td>Student’s Book: Pre-intermediate 2 (2004b, p. 116) Follow up</td>
</tr>
<tr>
<td>Musical (M)</td>
<td>108</td>
<td>28.19</td>
<td>English Time3: Student’s Book (2002a, p.7) Listen and Sing a Song</td>
</tr>
<tr>
<td>Interpersonal (IR)</td>
<td>57</td>
<td>14.88</td>
<td>Student’s Book: Pre-intermediate 3(2004c, p. 24) Follow Up</td>
</tr>
<tr>
<td>Naturalist (N)</td>
<td>0</td>
<td>0</td>
<td>........</td>
</tr>
</tbody>
</table>

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As it is shown in Table 14 and Figure 4, the profile of the eleven coursebooks was mainly verbal/linguistic. This intelligence type was present in all of the 383 activities analyzed for this study. Other intelligence types such as spatial/visual and logical/mathematical were present only in 47.78% (spatial/visual) and 43.86% (logical/mathematical) of the 383 activities. Naturalistic intelligence was absent in all the activities analyzed for this study. This may be due to the restrictions of the present study, as not all units of every book have been analyzed, or due to the lack of attention attached to it by the authors of the coursebooks.

The findings of this study are very similar to those of Kırkgöz’s (2010) study. In both studies, verbal/linguistic intelligence type is the most dominant intelligence type and spatial/visual is the second one. Naturalistic intelligence is the one which received the least attention in the coursebooks analyzed in both studies. Moreover, the current study is somehow similar to the one done by Botelho (2003) with regard to the results. In both studies, naturalistic intelligence was the least common type and bodily/kinesthetic intelligence was
present in less than 10% of the activities. However, in the present study musical intelligence is present in 28.19% of the activities but in Botelho’s study only 1.18% of the activities addressed it.

4.4. Predominant Intelligences

Regarding the second research question which asked for those intelligence types to which more attention is paid, in this part predominant intelligences are discussed. As it was mentioned before the most common types of intelligence in the eleven coursebooks analyzed in this study are verbal/linguistic, spatial/visual, and logical/mathematical.

Verbal/linguistic intelligence was present in 100% of the activities in different forms such as reading, listening, sentence making, etc. It was expected in advance as different language skills like reading, writing, speaking and listening are always present in language coursebooks.

Spatial/visual intelligence type was also considered a predominant intelligence type since 47.78% of all activities of the units analyzed for the present study had some kind of pictures, tables, etc. Although the ILI coursebooks of the adult department are not as visual as other coursebooks available in Iran such as Top Notch or Interchange, there are different pictures/photographs that illustrate different activities of the coursebooks like dialogues, reading passages, listening activities, grammar exercises and vocabulary. There are also different tables and graphs especially for listening activities. It is worth mentioning that the books designed for young adult section were much more visual. They represented 93.54% spatial/visual intelligence while those developed for adults represented less (38.94%) of this intelligence type. It seems that more visual input is prepared for young adult language learners.
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Logical/mathematical intelligence type was also present in 43.86% of all activities. Different activities regarding this intelligence type are matching, ranking, using statistical information, guessing and making predictions, reasoning, etc. Explanation of the explicit rules of grammar was also included too much in each unit especially in adults’ books which is considered as activities catering to logical/mathematical intelligence.

4.5. Less Common Intelligences

Musical, Interpersonal, Intrapersonal, Bodily/Kinesthetic, and Naturalist intelligences were less commonly represented intelligence types in the books analyzed. They were present in less than 40% of the activities in the eleven coursebooks. Musical intelligence was present in 28.19% of the activities, Interpersonal in 14.88%, Intrapersonal in 6.26%, and Bodily/Kinesthetic in 7.83%. Naturalist intelligence type was not present in any of the activities studied for this study which may be due to the limitations of the study.

The musical intelligence was present in activities regarding listening comprehension. In young adults’ books, there was a song in each unit which contributed to this intelligence.

The most common activities for bodily/kinesthetic type of intelligence were role-plays, the activities regarding body language and those which engage pointing to objects or people especially in young adults’ books.

As it was mentioned before, interpersonal type of intelligence was present in 14.88% of the activities. Pair work and group work are the most common types of activities which enhance this intelligence type and the interaction between students. Interpersonal intelligence can be enhanced in different types of activities such as listening, reading, speaking and writing. Many activities in the books analyzed cater to listening and especially speaking activities done in
pairs or groups.

Intrapersonal intelligence was very rare and it was present only in 6.26% of all the activities. Those activities found for this intelligence type mostly required giving personal opinion, talking about one’s experiences, talking about oneself, and reflecting.

No activity catering to naturalist intelligence was observed among the activities analyzed in the present study. It may be due to the limitations of this study or a shortcoming in the coursebooks.

5. Conclusions

The first research question was “To what extent do the coursebooks presently used at the Iran Language Institute represent the MI types?” There is no homogeneity in the representation of MI types in these books which is a great shortcoming of the books. On the one hand, verbal/linguistic type of intelligence is present in all of the activities analyzed and on the other hand naturalistic intelligence is absent in all of them. The intelligence types which rank below verbal/linguistic are logical/mathematical and spatial/visual with the former present in 43.86% of the activities and the latter in 47.78% of them. The Musical intelligence was present in 28.19% of the activities and the interpersonal intelligence in 14.88%. Regarding the importance of these intelligence types, these percentages are very low with the rising interest of scholars all around the world in communicative language learning approach. Unfortunately only 7.83% of the activities analyzed catered to bodily/kinesthetic type of intelligence and 6.26% to intrapersonal type. No attention is paid to naturalistic intelligence which is absent in all of the activities.

The second research question was “To which intelligence type more
attention is paid?”. The results of the study showed that the coursebook intelligence profile of the eleven books analyzed in this study was predominantly composed of three intelligences: verbal/linguistic, logical/mathematical and spatial/visual. According to the results presented in the previous section, verbal/linguistic intelligence was present in 100% of the activities since they included some sort of reading, listening or speaking which enhance this intelligence type. Logical/mathematical intelligence was present in 43.86% and spatial/visual type of intelligence in 47.78% of the activities. The less common intelligences are naturalistic, intrapersonal and bodily/kinesthetic that are present in less than 10% of the activities; that is, naturalistic intelligence is absent in all of them, intrapersonal intelligence present in only 6.26% and bodily/kinesthetic intelligence in 7.83%. These results showed a great lack of variety in the coursebooks analyzed. There is nothing wrong with verbal/linguistic being present in all activities since the aim of these books is to teach a foreign language but the authors and those responsible in designing curriculum have to be more conscious regarding differences among students. The existence of pictures and visual input, musical and listening activities, pair work and role-plays, not only makes the classroom more enjoyable but also facilitates the process of learning and teaching a language. In the general coursebook profile, the distance between the first predominant intelligence type with the second and the third ones is too much which can roughly mean there is only one predominant intelligence type; namely, verbal/linguistic.

The third research question was “Is there any difference between the coursebooks used in adult and young adult sections of the ILI with regard to representation of MI types?” As it was discussed in the previous section, there were only two similarities observed between them. The first one is that 100% of the activities catered to verbal/linguistic intelligence type in both sets of books
and the second similarity is that naturalistic intelligence was absent in the activities analyzed in both sets of books. On the other hand, great differences exist between them. Books taught to young adults are highly visual (images are present in 93.54% of the activities) but only 38.94% of the activities in adults’ books have some sort of pictorial information. In adults’ books, 50.15% of the activities catered to logical/mathematical intelligence but in young adults’ books 11.29% did so. These results were harmonious with the age of both groups of language learners. Although 74.19% of the activities in young adults’ books represented musical intelligence, which is a high percentage, only 19.31% of the activities in adults’ books catered to it. For interpersonal type of intelligence, the results were not so different, 14.01% of the activities in adults’ books and 19.35% of them in young adults’ books included some sort of this intelligence type. The results obtained from the analysis of the two sets of books for bodily/kinesthetic intelligence were dissimilar, too. This type of intelligence was present in only 3.11% of the activities in adults’ books which was really low but it was present in 32.25% of the activities in the second set of books. Regarding intrapersonal intelligence, a kind of dissimilarity is found, too. 24% of the activities in adults’ books catered to it but it was completely absent in the books taught to young adults at the ILI.

5.1. Implications of the Study

The present study intended to analyze how the Iran Language Institute's coursebooks correspond to Multiple Intelligence Theory and to what extent they include all the intelligences in the activities. The difference between adults’ and young adults’ books was questioned, too. Iran Language Institute as the biggest, oldest and the most well-established language institute in Iran attracts the attention of a large number of language learners. Lots of these
students succeed a lot but a great number of them fail and withdraw from language learning as they consider it a difficult monotonous job. They may continue this task in other private institutes but lots of them forget about learning English forever. In this study, the coursebooks written and taught at the Iran Language Institute were evaluated with regard to the theory of multiple intelligences to check if the failure of these students originates from the books which do not cover their favorite kind of intelligence.

The findings of the study proved these books to be monotonous in representing different types of intelligence. Verbal/linguistic intelligence type was present in all activities analyzed for the present study. 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. The findings show lots of inconsistency in applying different types of intelligence in these coursebooks.

The authors of these books may resort to the findings of this study to revise the coursebooks so that they include all intelligence types homogeneously to accommodate the differences among language learners.

5.2. Suggestions for Further Research

Since one of the limitations of this study was the number of coursebooks analyzed (eleven intermediate level coursebooks), other coursebooks such as elementary and advanced books taught at this institute could be analyzed in terms of the same theory. It is also possible to analyze adults’ or young adults’ books in separate studies. Another possibility could be to compare these coursebooks with other ones currently used in other language institutes with regard to MI theory. These coursebooks could be analyzed in terms of other theories or approaches to coursebooks evaluation, too.
It would also be possible to study MI theory and its application in teacher training programs, procedure of teaching a second/foreign language in the classroom, assessment and testing. Teachers could also introduce this theory to their students while teaching another language to them so that they would be more conscious of their abilities and weak points and also understand and appreciate the differences existing among themselves.

An extension to this study could be to investigate the relationship between MI and other topics in language teaching and learning such as self-efficacy in students and teachers, language learning strategies, teacher’s teaching strategies, computer-based training, and autonomy in learning.

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