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The Extent to Which Multiple Intelligences Are Catered for in Action Pack Textbooks (Grades 1-10) in Jordan

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Abstract

The main purpose of this study was to explore the extent to which Multiple Intelligences (MI) are addressed in Action Pack textbooks for grades 1-10 in Jordan. It also aimed to identify the most common and least common types of intelligence in the target textbooks. A checklist was developed by the researcher in order to analyze the activities in the textbooks in light of different types of intelligence. Results showed that the types of intelligence addressed in those textbooks were mainly verbal /linguistic, whereas the logical /mathematical, spatial /visual, and intrapersonal intelligences were fairly addressed. On the other hand, the results revealed that interpersonal, bodily/kinesthetic, musical, and naturalist were the least common types of intelligence, while existential intelligence was not catered for in any of the textbooks. Based on those results, it was recommended that EFL curricula developers, textbook authors, and teachers should include a wider range of activities that reflect a more balanced focus on the all types of intelligence.

Keywords: Multiple intelligences, Action Pack textbooks, EFL, Basic Stage, Jordan**.**

Introduction

Gardner (1983, 1999) proposed nine types of intelligence (i.e. logical intelligence, linguistic intelligence, spatial intelligence, musical intelligence, bodily intelligence, interpersonal intelligence, intrapersonal intelligence, naturalist intelligence, and existentialist intelligence). The principles of Gardner's theory of multiple intelligences can be implemented for designing English language curricula and textbooks and other learning materials, so that they can resonate with students' varied needs, interests and learning styles (Estaji and Nafisi 2015, 2-4; Ibrahim 2020; Kırkgöz 2010, 127-128). According to Gardner (1983), every human being possess different types of intelligence, but each one may differ in the degree he or she demonstrates those intelligence (Hewitt 2008). As a result, this may represent a challenge to any educational system that assumes all students should be taught and tested in the same way (Lunenburg and Lunenburg 2014, 1).

The theory of MI has moved the focus from teacher-centered instruction to learner-centered instruction. Therefore, it is essential that students' interests, abilities, and learning styles be catered for

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when designing any effective instructional program. This implies that a wide variety of learning activities should be available in the curriculum for mixed-ability students, although it is impractical to design so many syllabi that can respond to all students' needs. Although learners may have similar types of intelligence**,** they may deal with the same learning task differently. This implies that the curriculum should promote a broad range of students' talents and skills (Muhaidib and Saab 2011, 33-35).

Many researchers such as Al-Salameh (2012), Armstrong (2009), Botelho (2003), Derakhshan, and Faribi (2015), Estaji and Nafisi (2015), Kırkgöz (2010), Lunenburg and Lunenburg (2014), Madkour and Mohamed (2016), Taase (2012) and Zhu (2011) have proposed similar definitions of the nine types of intelligence, which can be roughly summarized as follows:

- **Verbal/linguistic:** The ability to use words, phrases or sentences accurately in order to communicate with others both orally and in writing. Linguistically intelligent learners are those who have a strong liking for using language creatively, sharing classroom discussion, and expressing ideas freely.
- **Logical/mathematical:** The ability to recognize the basic characteristics of numbers, the relationship between cause and effect, and to make predictions. It also includes the ability to think critically, solve problems, test hypotheses, analyze and synthesize information, interpret and infer conclusions using logical relationships.
- **Spatial/visual**: The ability to realize and understand directions, graphically represent visual or spatial information, figure out maps, tables, figures, and imagine abstract concepts and shapes, as well as design models and decorate them.
- **Bodily/kinesthetic**: The ability to utilize body language such as gestures and facial expressions in order to express own ideas feelings or impressions to support verbal communication. It also includes dancing, acting, role playing, using handmade crafts, and using senses.
- **Musical**: The ability to express feelings or covey meaning through rhythm, pitch, melody, or singing. It also includes the ability to appreciate songs, recite, and compose them.
- **Interpersonal**: The ability to understand and respect the moods, feelings, attitudes, and intentions of other people through communicating with him or her. This includes love for socializing, working in groups, sharing suggestions and feelings, maintaining social rapport, and being extroverts.
- **Intrapersonal**: The ability to understand and reflect on your own strengths, weaknesses, feelings, preferences, and intentions as a learner. This includes being aware of how you are similar to or dissimilar from other people, knowing about your traits as a learner, managing your feelings, emotions, attitudes and behavior. These learners usually prefer to work alone, analyze every learning act and reflect on it. These are mainly introverts who prefer to detach themselves from others and work independently.
- **Naturalist**: The ability to recognize and classify plants, animals, minerals or other objects in nature. This ability also includes understanding, explaining, and describing things or events encountered in nature. Thus, it may be reflected by exploring outdoors, identifying objects, gardening, wildlife observation, and studying natural phenomena.

- **Existential:** The ability to deal with philosophical questions about the nature and reason for human existence on earth. This ability is also associated with some spiritual or philosophical concepts such as the importance or the essence of life, death, or life in the hereafter.

Background of the study

In 2005, The Ministry of Education (MoE) in Jordan developed the EFL curriculum to give students opportunities to define their own ways of learning, study different topics of their interests, and use a variety of learning resources to achieve the intended learning outcomes (ILOs) of that curriculum. Accordingly, English textbook authors were required to account for the individual learning needs of all students by incorporating a wide variety of activities, tasks, and exercises at each grade level (1-12). Nevertheless, many educational stakeholders believe that students are still spoon-fed, have no real chances to use critical thinking skills, lack motivation to learn EFL, do not relate what they learn at class to their daily lives, and they are authority-oriented learners (MoE 2013, IV-V).

However, the MoE and the National Center for Curriculum Development (NCCD) in Jordan have lately led a comprehensive education reform movement aiming at meeting the needs of learners in public schools. Accordingly, instruction has been designed and organized in ways that encourage learners to use their background experiences and multiple intelligences to construct the knowledge and principles that help them to best understand themselves and others. Therefore, the activities in EFL textbooks are expected to help learners to actively participate in classroom discussions, exchange ideas, negotiate meanings, and solve problems. Moreover, learners are now viewed as autonomous, reflective, intrinsically motivated, risk-takers, proactive, critical, analytical and good guessers in the EFL classroom (NCCD 2019).

To this end, Action Pack series (1-12), which was developed by Pearson Education Ltd., has been adopted (often adapted) by the MoE to achieve the intended objectives of the Jordanian English language curriculum. This series provides learners with varied topics, integrated language skills and subskills, project works and critical thinking skills with special emphasis on using grammar functionally. The components of Action Pack series include teachers' books, students' books, workbooks, cassettes and CDs. There are approximately ten units in each of the Action Pack textbooks. Each of these ten units consists of five- six lessons that address the four main language skills and subskills. Students have to do many exercises and activities designed to achieve the ILOs listed at the beginning of each unit in the twelve textbooks.

Purposes and Questions of the Study

Since the EFL curriculum in Jordan emphasizes learner-centered instruction, it expected that the activities of each unit should cater for the varied needs, interests, learning styles, intelligences and preferences of students. Therefore, the following two questions were addressed in this study: (1)To what extent do Action Pack textbooks (Grades 1-10) in Jordan cater for multiple intelligences?, (2) What are the most common and the least common types of intelligence that are catered for in these textbooks ?

Review of related literature

Multiples intelligences theory applied to teaching.

Gardner (1983) claims that everyone has the ability to develop all types of intelligence provided that he/she is introduced to a varied array of learning activities and tasks. For example, the verbal/linguistic intelligence can be developed by asking students to build words and sentences or to tell stories in a foreign language, while logical/mathematical intelligence can be developed by doing Logic puzzles, solving problems, and discovery. In the same vein, charts, graphs, pictures, diagrams could be used to develop the visual/spatial intelligence, while group work, pair work and classroom discussions can develop the interpersonal intelligence. Intrapersonal intelligence can also be developed by asking students to keep learner diaries, self-study and set personal goals. Finally, classifying objects and doing projects in natural settings can help the students develop their naturalist intelligence. Therefore, teachers must cater for all types of intelligence in each lesson if they plan to approach all of their students" (Isisag 2008).

"Multiple intelligences (MI) refers to a learner-based philosophy that characterizes human intelligence as having multiple dimensions that must be acknowledged and developed in education. Theory of (MI) has become widely recognized as a useful framework for teachers making sense of their observations that different students have different strengths and learn in different ways" (Dastgoshadeh and Jalilzadeh 2011, 58).

Applying MI theory to teaching enables teachers to identify students' interest, needs, preferences, and to develop a more inclusive instruction that accounts for students' individual differences. This may give students a sense of achievement as able or intelligent learners. Therefore, authors of English textbook should address different types of intelligence in the content, activities and exercises because students generally rely on the textbook as the main source of learning, especially in the EFL setting. On the other hand, English language teachers may develop classroom activities that cater for different types of intelligence and learning styles. They can also assume different roles such as facilitators, observers, curriculum developers, lesson designers and analysts (Botelho 2003; Currie 2003; Omari 2018).

Arnold and Fonseca (2004, as cited in Spirovska 2013, 6) stated, "With MIT applied in the language classroom, teachers are better able to tap into the areas of personal meaningfulness of their students since they are recognizing the differences inherent in the students and putting individuals with their different ways of learning where they belong, back at the Centre of the learning process." Spirovska (2013, 8) added, "Teachers have the option of analyzing their own profile according to Multiple Intelligences theory, which will enable them to link their own experiences as learners with their current teaching situation." Therefore, their role is extended beyond teaching; they also influence the lesson development as well as curriculum development." In addition to this, Armstrong (2009) argued that utilizing the MI theory at class might help teachers to reflect upon their teaching practices to make sure that they really work for their students. For example, teachers can improve their classroom practices by applying more recent teaching methods, selecting or designing more relevant learning materials, and involving more students in classroom interaction progress.

With regard to language assessment in light of MI theory, Lunenburg and Lunenburg (2014) argued that students' understanding can be measured by activating their multiple intelligences at different educational stages. For instance, elementary -grade students can be asked to compose and sing songs to consolidate grammar concepts, while intermediate- grade students can create multimedia presentations and use animations. Regarding students in higher-grade levels, they may show their research skills, portfolio writing, doing presentations. Dastgoshadeh and Jalilzadeh (2011, 61) also states, "Assessments should not simply be tests, homework assignments, textbook pages, or worksheets. Both multiple intelligences and differentiated instruction allow for varied assignment forms and projects."

Previous studies

The principles of the theory of multiple intelligences have been used by researchers as a frame of reference for analyzing textbooks. One example was a study conducted in Brazil by Botelho (2003) with the main purpose of investigating the application of MI theory in six English textbooks (Ramadan 2017). Data were collected via content analysis and questionnaires. Results revealed that linguistic intelligence, intrapersonal intelligence, logical intelligence and interpersonal intelligences were only four types of intelligence which were emphasized in the analyzed text books.

Kırkgöz (2010) also examined the types of multiple intelligences that were addressed in Turkish primary stage textbooks. To achieve this purpose, the activities of each textbook were analyzed using a MI-based checklist. The results of the study showed that the verbal-linguistic and visual-spatial intelligence were the most dominant types of intelligence, while the naturalistic intelligence was the least common type of intelligence in the textbooks, and the spiritual-existential intelligence was not addressed. On the other hand, there was a fair distribution of the other types of intelligences.

In a similar vein, Muhaidib and Saab (2011) investigated the most common intelligences among Saudi English as Second Language (ESL) undergraduates in order to design a more suitable curriculum adaptable to all learners. The participants of the study were one hundred and eighty English undergraduates in the Faculty of Arts at King Faisal University. A multiple intelligences- based test was used to collect data of the study. Descriptive statistics including frequencies and percentages were used to analyze data of the study. The results of the study revealed that distribution of different types of intelligence was unbalanced. That is, the percentage of linguistic intelligence was 31%, intrapersonal intelligence 19%, interpersonal intelligence 18%, logical intelligence 11%, while all the remaining types of intelligences represented 215 of the total sum.

Furthermore, Tasse (2012) analyzed three textbooks used to teach English Iranian primary stage students using a multiple- intelligences framework. The learning activities in three textbooks were analyzed and classified using a specially prepared checklist that was developed by Botelho in 2003. Results revealed that linguistic intelligence and visual intelligence were the most common types of intelligence, which were followed by logical intelligence, interpersonal intelligence and intrapersonal intelligence respectively. There were no examples of bodily intelligence, musical intelligence or naturalist intelligence in the examined textbooks.

In another study, Nasiri et al. (2012) explored the types of intelligence represented in English primary grade textbooks for Iranian students. Data were analyzed by using a multiple intelligence checklist. Results showed that the logical/ mathematical intelligence and visual/spatial intelligence were the most dominant, while musical intelligence and verbal/linguistic intelligence were least dominant types. Most of the other types of intelligence were addressed to a fair degree.

Similarly, Estaji and Nafisi (2014) investigated the degree to which activities and tasks in four young learner's textbooks in Iran reflect multiple intelligences in order to determine whether more types of intelligence should be included in those textbooks. It also aimed to explore what teachers have do to compensate for these inconveniences. Therefore, a multiple intelligences checklist was developed to collect data of the study. The results of the study showed that verbal / linguistic intelligence was the most dominant type of intelligence; the naturalistic intelligence was the least catered for type, whereas spiritual and existential intelligences were not addressed. As for the other types, they were fairly represented in the targeted textbooks.

Moreover, Al Seyabi and A'Zaabi (2016) analyzed the Omani twelfth -grade EFL textbooks to identify the most dominant and the least dominant types of intelligence in those textbooks. Content analysis revealed that the textbooks were predominately verbal-linguistic intelligence was the most dominant followed by the interpersonal intelligence, and logical intelligence respectively. Based on those results, the researchers recommended that the Omani EFL curriculum should be reconsidered in light of the principles of the theory of multiple intelligences in order to improve students' learning.

As far as the studies conducted on MI in Jordan, Khamis (2005) investigated the effect of an instructional program based on the theory of multiple intelligences on improving the writing skills of basic stage EFL students in Jordan. To collect data of the study, the quasi- experimental design was adopted, using pre and posttests. The participants were one-hundred and fifty eight (158) students in grade ten. The results of of the study showed that applying the intelligence-based program significantly improved the paragraph writing among students of the experimental group.

Moreover, Jallad and Bani-Abdelrahman (2008) examined the effectiveness of applying selected multiple intelligences (logical, linguistic, intrapersonal and interpersonal) in developing the reading comprehension skills among one- hundred ninth grade EFL students in Jordan. Data were analyzed by using descriptive statistics (Means and standard deviations). The findings of the study showed that emphasizing those types of intelligence had a significant effect on improving students' reading comprehension achievement. Therefore, the researchers recommended that teacher education programs and EFL curricula in Jordan should address the principles of the multiple intelligences theory.

In another study, Al-Omari (2010) analyzed all the learning activities in Action Pack textbooks for the first , fourth , eighth and eleventh grades. The study was intended to find out the extent to which the principles of multiple intelligences theory were catered for in those textbooks. To analyze the data of the study, frequencies and percentages were calculated and compared. The results of the study revealed that the verbal/-linguistic intelligence, intrapersonal intelligence and spatial-visual were the most common

types of intelligence in the four textbooks. Results revealed that neither the spiritual intelligence nor existential intelligence was addressed in any of those textbooks.

In addition, Al-Faoury and Smadi (2015) examined the effect of applying an instructional program on developing multiple intelligences among Jordanian university students. The study also aimed to investigate the effect of the interaction between gender and the instructional program on the types of intelligence among the participants of the study. Descriptive statistics (Means, standard deviations) and inferential statistics (ANCOVA) were used analyze the data of the study. Results revealed that the treatment group who received the interactive skills program achieved significantly higher than students who did not. As for the gender variable, results showed that female students achieved significantly higher than male students did concerning the linguistic and interpersonal intelligences, whereas they achieved lower than male students concerning the logical intelligence and and intrapersonal intelligence.

In another study, Al-Omari et al. (2015) analyzed the content of a selected series of textbooks (i.e. Action Pack 1, 4, 8 and 11) used in Jordan to to explore the extent to which the Multiple Intelligences are represented in those textbooks. Results showed that none of the four analyzed textbooks included instances of existential intelligence, moral intelligence, or spiritual intelligence. Results also revealed that the verbal intelligence, intrapersonal intelligence and visual intelligence were represented, but they were unequally distributed in the four textbooks.

Alqatanani (2017) conducted a study that aimed to investigate the effect of an instructional program based on the theory of multiple intelligence on developing critical reading and creative reading skills among tenth grade EFL students in Jordan, and to investigate their attitudes towards the program. The sample of the study consisted of eighty-seven students in grade ten. Date were collected by using three tools: a creative reading test, a critical reading test, and an interview. The results showed that instructional program based on the theory of multiple intelligence significantly improved the critical reading skills and the creative reading skills of the participants. The results also showed that most of the students who were taught using the instructional program developed more positive attitudes toward it at the end of the treatment.

More recently, Al Maharma (2021) explored the activities that reflect the principles of multiple intelligences theory in the Jordanian EFL text books (Action Pack 9, 10 and 12). In particular, the study was intended to explore the types of intelligence that were most in those textbooks. Therefore, six-hundred and eight (608) activities were analyzed by calculating frequencies and percentages. Results revealed that the linguistic intelligence and spatial intelligence intelligence were the most dominant types in the textbooks. On the other hand, the results indicated that the different types of intelligence were unequally reflected in the activities of the three textbooks.

The results of the studies reviewed above showed that not all types of intelligence were represented in the EFL textbooks. Even if all types of intelligence were addressed in some textbooks, the distribution of those types was unbalanced. As far as the EFL studies conducted in Jordan, it seems that the majority of those studies dealt with the effect of using multiple intelligences on improving students' achievement

in English. It is also hoped that the present study will provide more insights into the degree multiple intelligences are emphasized in Action Pack textbooks 1-10.

Method

Materials

In the Jordanian educational context, students study English as a foreign language from grade 1 to grade 12. Accordingly, Action Pack series consist of students' books, workbooks, and teacher's books for each grade level. The teacher's book includes the same lessons in the student's book and in the workbook in addition to instructions how to teach each lesson in those textbooks. For the purpose of the present study, Action Pack textbooks (1-10) were selected. All the activities in those textbooks were thoroughly analyzed to measure the degree each intelligence was represented in each textbook.

Research Instrument

To collect data this study, a checklist was developed by the researcher based the theory of Multiple intelligence of Gardner (1983, 1999). Therefore, all the activities in Action Pack textbooks (Grades 1-10) were thoroughly analyzed to investigate the degree each type of intelligence (i.e. Verbal-linguistic, Logical-mathematical, Spatial-visual, Bodily-kinesthetic, Musical, intrapersonal, naturalist, Interpersonal, and existential intelligence) was represented in each textbook. The checklist was used as a 'coding scheme' for analyzing each activity based on the recommendations of the experts. Accordingly, the frequencies of the activities, questions, and tasks in each textbook were calculated. The types of intelligence represented in each textbook were also calculated together with their corresponding percentages.

Two analysts reviewed the textbook activities and identified the types of intelligence which were catered for in each textbook. Those two raters were graduate students who had good experiences in the content of Action Pack textbooks as well as in multiple intelligences. Moreover, the two analysts were trained how to use the coding scheme to analyze and classify the textbooks' activities into different types of intelligence. To this end, an extensive list of key words and examples on each type of intelligence were presented to the two raters prior to data analysis. Then, a sample of 300 activities from the textbooks was analyzed by each one of the two analysist independently to establish inter-rater reliability. The percentage of agreement between the two analysts was 87%. Therefore, the two raters analyzed all the activities in Action Pack textbooks (1-10). Sometimes, a third analyst was consulted when the two raters had different classification of the same intelligence.

Data analysis

In order to categorize an activity in Action Pack textbooks (1-10) under the relevant type of intelligence, the first step was to determine which intelligence that activity mainly addressed. For instance, the activity "listen and repeat" was apparently intended to address verbal/linguistic intelligence, while an activity like " draw and color " was categorized as visual/ spatial. Therefore, each one was categorized into a single type of intelligence.

However, some activities addressed more than one type of intelligence since they consisted of more than one task. For example, "Follow short, simple oral instructions (e.g. touch your ear) was categorized both as verbal/linguistic and bodily/kinesthetic; while "Ask and answer", was categorized into verbal/linguistic and interpersonal; and "Listen, draw, and color" was categorized into verbal/linguistic and visual/ spatial (For more examples of classification, please see appendix 1).

Results

To answer the two questions of the study, frequencies and percentage of each type of intelligence addressed in Action Pack textbooks were calculated. The results are presented in Table 1.

Table 1 displays the number of activities in Action Pack textbooks (1-10) which reflect each type of intelligence along with their frequencies and percentages. As can be noted from the distribution of intelligences, all types of intelligence were represented in Action Pack textbooks with varying degrees, except for the existential intelligence which was not represented in any of the ten text books analyzed. Moreover, the results revealed that the most dominant type of intelligence in Action Pack textbooks 3, 4, 6, 7, 8, 9, and 10 was Verbal/ Linguistic (44.63%, 44.46%, 40.89%, 36.00%, 47.50%, 45.40%, and 43.77% respectively), while the most dominant type of intelligence in Action Pack textbooks 1, 2, and 5 was Spatial/ Visual (*41.00%*, 36.84%, and 37.76% respectively).

Table 1 also shows that in Action Pack textbooks 1, 2, and 5 the second most dominant type of intelligence was Verbal/ Linguistic (*18.94*, 32.56, and 27.98 respectively). As for Action Pack textbooks 3 and 4, the second two most dominant types of intelligence were Spatial/ visual (33.17% and 31.51%), whereas the second most dominant type of intelligence in Action Pack textbooks 6, 8, 9, and 10, was Logical/ mathematical (16.82%, 27.63%, 31.50%, and 28.80% respectively).

According to the results presented in Table 1, the third most frequently addressed intelligence type in Action Pack textbooks 1, 6, 8, 9, and 10 was intrapersonal (*15.10%*, 16.20%, 11.79%, 10.60% and 12.02% respectively), while in Action Pack textbook 2 the third most frequently addressed intelligence type was bodily/ kinesthetic (09.53%). It can also be realized from Table 1 that the Logical/ mathematical intelligence was the third most frequently addressed intelligence in Action Pack textbooks 3, 4, 5, and 7 (11.70%, 11.24%, 22.30%, and 18.99% respectively).

To conclude, the results of this study indicated that the intelligence profile for Action Pack textbooks (1-10) was predominantly verbal/ linguistic (39.96%), and logical/ mathematical (21.18%), with a fair percentage of distribution for spatial/ visual (15.69%) and intrapersonal (14.03%), while the least dominant types of intelligence were: naturalistic intelligence (00.30), musical intelligence (00.62), bodily/ kinesthetic (01.39) and interpersonal intelligence (06.80). It can be concluded that, although eight types of intelligence out of nine were catered for in Action Pack textbooks (1-10), the distribution of multiple intelligences to the textbook activities was notably unbalanced.

Table 1: Distribution of Intelligence Types Addressed in Action Pack Textbooks for Basic Stage (Grades-10) by Frequency and Percentage.

Action Pack Textbooks	**Verbal/ Linguistic**	**Logical/ mathematical**	**Spatial/ visual**	**Bodily/ kinesthetic**	**Musical**	**Interpersonal**	**Intrapersonal**	**Naturalistic**	**Existential**	**Total**
Book 1	79	29	171	39	9	27	63	0	0	417
	18.94	*06.95*	*41.00*	*09.35*	*02.15*	*06.47*	*15.10*	*00.00*	*00.00*	100
Book 2	99	19	112	29	7	21	17	0	0	304
	32.56	06.25	36.84	09.53	02.30	06.90	05.59	00.00	00.00	100
Book 3	183	48	136	4	4	22	13	0	0	410
	44.63	11.70	33.17	00.97	00.97	05.36	03.17	*00.00*	*00.00*	100
Book 4	261	66	185	2	5	37	31	0	0	587
	44.46	11.24	31.51	00.34	00.85	06.30	05.28	*00.00*	*00.00*	100
Book 5	143	114	193	0	5	32	24	0	0	511
	27.98	22.30	37.76	00.00	00.97	06.26	04.69	*00.00*	*00.00*	100
Book 6	265	109	95	14	15	36	105	9	0	648
	40.89	16.82	14.66	02.16	02.31	05.55	16.20	01.38	0.00	100
Book 7	453	239	87	3	0	70	406	0	0	1258
	36.00	18.99	06.91	00.23	00.00	05.56	32.27	*00.00*	*00.00*	100
Book 8	447	260	57	1	0	63	111	2	0	941
	47.50	27.63	06.05	00.10	00.00	06.69	11.79	00.21	00.00	100
Book 9	454	315	51	0	0	71	106	3	0	1000
	45.40	31.50	05.10	00.00	00.00	07.10	10.60	00.30	*00.00*	100
Book 10	506	333	48	9	0	113	139	8	0	1156
	43.77	28.80	04.15	00.77	00.00	09.77	12.02	00.69	*00.00*	100
Total	**2890**	**1532**	**1135**	**101**	**45**	**492**	**1015**	**22**	**00.00**	**7232**
	39.96	**21.18**	**15.69**	**01.39**	**00.62**	**06.80**	**14.03**	**00.30**	**00.00**	**100**

Multiple Intelligence Types by Frequency and Percentage (F & %)

Discussion of the results

According to the National Centre of Curriculum Development (2019, 18)**,** "Instruction is designed and organized in ways that encourage learners to use their background experiences and multiple intelligences to construct the knowledge and principles that help them to best understand themselves and others". The curriculum guidelines represent a roadmap for textbook authors to select the content and the learning activities. Teachers' guides also provide teachers with a set of methods to teach students the textbook lessons and activities. Therefore, the present study aimed to investigate how much multiple intelligences are represented in the EFL textbooks for grades 1-10.

The analysis of Action Pack textbooks revealed that eight types of intelligence out of nine were reflected in the activities of these textbooks, but with varying degrees. This indicates that the authors of Action Pack were aware of the importance of addressing different types of intelligence in the textbooks, so they tried to match the content and the activities with the ILOs of the EFL curriculum in Jordan. Table 1 also revealed that the most dominant type of intelligence was verbal/ linguistic (39.96%). This result is expected because, in contexts where English is taught as a foreign (not a first or a second) language, students do not have the chance to develop or use language outside the classroom. Therefore, most of the activities were designed to promote verbal/ linguistic intelligence. This result supports those of Al-Omari (2010), Al-Omari et al. (2015) and Al Maharma (2021).

The second most dominant type of intelligence in Action Pack (1-10) was logical/ mathematical (21.18%). This result was also expected since many activities in the textbooks require students to reason analyze and make inferences to provide full answers as indicated in the rubric of an activity, question, or exercise. For example, students were asked to justify their answers to reading and listening comprehension questions, guess meaning of new words from the context, or participate in brain storming tasks. In doing all of those tasks, students had to think logically, analyze, and figure out answers as a solitary act. This also may explain why intrapersonal intelligence was addressed more frequently (14.03%) than interpersonal intelligence (6.80%) in most of the textbooks analyzed. In fact, intrapersonal intelligence requires more individual work and more analysis than interpersonal activities such as pair work or group work. Another reason why interpersonal intelligence was not among the most dominant types of intelligence in Action Pack textbooks (1-10) could be due to the low-level proficiency of EFL students, since they usually have very little chances to communicate in English outside the classroom. This may also explain why textbooks activities were designed to mainly promote verbal/ linguistic intelligence as previously mentioned. This result is in agreement with that of Nasiri et al. (2012) that interpersonal intelligence was barely addressed in the Iranian textbooks.

On the other hand, results presented in Table 1 revealed that the least frequently addressed types of intelligence in Action Pack textbooks (1-10) were bodily/ kinesthetic, musical and naturalist since the percentage of none exceeded 3%, whereas no evidence of existential intelligence could be identified in any of the ten textbooks analyzed. One possible explanation for this result could be that the ILOs in the EFL curriculum in Jordan do not cater much for these three types of intelligence, and so the authors of

Action Pack 1-10 did not include enough number of activities that addressed those types of intelligence. Another possible reason could be that the overcrowded classroom (an average class has 40-50 students) with the busy schedules of school did leave enough time for practicing non-cognitive learning activities such as singing, playing, ore making field trips. This result is also congruent with those of other researchers such as Botelho (2003), Muhaidib and Saab (2011), Palmberg (2001) and Tasse (2012).

To sum, the obtained data in this study revealed that the majority of intelligence types were represented in Action Pack textbooks (1-10), but their distribution to each grade level was apparently unfair. Therefore, a more balanced distribution of intelligence types in Action Pack textbooks (Grades-10) is badly needed.

Conclusions and implications

The present study aimed to find out if all types of intelligence were represented in Action Pack textbooks (grades 1-10) as reflected in the various activities, tasks, and exercises. It also aimed to identify the most and least dominant types of intelligence that were addressed in those textbooks. The results revealed that nearly all types of intelligence were catered for in the analyzed textbooks, but with varying degrees. The only exception was the existential intelligence, which was not represented in any activity of Action Pack textbooks. Moreover, results revealed that Action Pack textbooks (1-10) catered predominantly for verbal/ linguistic intelligence while the least dominant types were bodily/ kinesthetic, musical, interpersonal and naturalist. However, there was a fair distribution of other types of intelligence such as logical/mathematical, visual/spatial and intrapersonal.

The results also revealed that not all Action Pack textbooks catered for all types of intelligences, although this contradicts the principles of EFL learner- centred curriculum in Jordan. Clearly, EFL textbooks for basic stage EFL students in Jordan catered for linguistic intelligence more than other types of intelligence. This may explain why students are still evaluated by using language-oriented tests as the only credible and liable means of their learning progress. Gardner (2004, as cited in Muhaidib and Saab, 2011, 35) holds “Studies show that many students who perform poorly on traditional tests are turned on to learning when classroom experiences incorporate artistic, athletic and musical activities”.

Based on the abovementioned results, there are some pedagogical implications for textbooks authors, curricula developers and EFL teachers. For example, curriculum developers and textbook authors should ensure a more balanced distribution of intelligence types in every grade level. To this end, they must select or design the learning materials and activities that empower learners to explore their full potentials as successful learners. More specifically, the presently used textbooks (Action Pack 1-10) for basic stage EFL students in Jordan should be reconstructed to cater for all types of intelligence in the content and activities of the each textbook. Curriculum developers and textbook authors also need to seek feedback from students about the relevance of textbooks’ the content and activities to their needs, interests and types of intelligence.

On the other hand, teachers in Jordan follow a centralized curriculum for all public schools and they barely change the learning materials, or the teaching methods required by the MoE. Therefore, teachers

should be encouraged to add some extra activities that respond to the varying needs, styles, and intelligences of students (Estaji and Nafisi 2015). This will enable teachers to make informed decisions on teaching methods as well as assessment strategies (Isisag 2008). It will also provide students a supportive learning environment where every student feels that he has a sense of achievement. To this end, Wilson (2005, as cited in Muhaidib and Saab 2011, 39) states "It can be said that developing a curriculum that creates learning experiences based on multiple intelligences can provide opportunities to have a magnified or enhanced state of self-motivated learning"

Further studies can also be conducted to investigate the relationship between the distribution of multiples intelligence and students learning progress. This may include analysis of classroom events, classroom observation, and interviews with learners. Moreover, other researchers can compare the distribution of multiple intelligences in the different grade levels to see if this was congruent with the ILOs of each level. For example, Action Pack textbooks for grades 11 and 12 were excluded in this study because they were under review and modification when this study was conducted. Therefore, it is recommended that other researchers should complete this cycle.

مدى توافر الذكاءات المتعددة في كتب Action Pack المقررة للصفوف (1-10) في الأردن

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الملخص

هدفت هذه الدراسة بصورة رئيسة إلى الكشف عن مدى توافر الذكاءات المتعددة في كتب Action Pack المقررة للصفوف (1-10) في الأردن، كما هدفت إلى التعرف على أكثر هذه الذكاءات وأقلها شيوعاً في الكتب المستهدفة، وطوّرتْ أداة لتحليل الأنشطة والتمارين الموجودة في تلك الكتب في ضوء أنواع الذكاءات المتعددة، وأظهرت نتائج الدراسة أن أكثر الذكاءات التي عكستها تلك الأنشطة هو الذكاء اللغوي، في حين توزع كل من من الذكاء المنطقي والذكاء المكاني والذكاء الذاتي بدرجة متوسطة، ومن ناحية أخرى، كشفت الدراسة عن أن أقل أنواع الذكاءات انعكاساً في تلك الكتب هي الذكاء الاجتماعي والذكاء الجسدي والذكاء الموسيقي والذكاء الطبيعي، في حين لم يتم الاهتمام بالذكاء الوجودي في أي من تلك الكتب، وبناء على نتائج هذه الدراسة تمت التوصية بأن يقوم واضعو المنهاج والمؤلفون والمعلمون بتضمين الكتب المقررة أنشطة مستندة إلى الذكاءات المتعددة بدرجة أكثر توازناً.

الكلمات المفتاحية: الذكاءات المتعددة، كتب Action Pack، اللغة الإنجليزيّة كلغة أجنبيّة، المرحلة الأساسيّة، الأردن.

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Appendix 1

Sample activities addressing different types of intelligences

Verbal/linguistic

Listen and say

Complete the sentences

Verbal/linguistic, interpersonal

Ask and answer in pairs

Verbal/linguistic, intrapersonal

Read about the shops and decide where the people should go

Verbal/linguistic, Logical /mathematical

Correct the grammatical mistakes in the paragraph; give reasons.

Verbal/linguistic, Bodily/ kinesthetic

Complete the missing information and act out the conversation

Logical /mathematical

Tick or cross the correct number

Count and match

Visual/ spatial

Draw and color

Look and trace the lines

Visual/ spatial, verbal linguistic

Match pictures with words

Musical, bodily/ kinesthetic

Sing and point

Intrapersonal

Do you remember the story now? Decide where these words and expressions go.

Bodily/ kinesthetic, Verbal/linguistic

Touch and talk