ANALYZING ISLAMIC EDUCATIONAL TEXTBOOK QUESTIONS IN SECONDARY SCHOOLS IN IRAQ

Eman Gh. Nayef [1] and Nik Rosila Nik Yaacob

School of Educational Studies, University Science Malaysia,
Penang 11800, Malaysia

[1] emangh81@yahoo.com

Abstract
This study aimed to analyze textbook questions in Islamic education textbooks in the three levels of secondary schools in Iraq according to Bloom's taxonomy cognitive domain and to provide a few recommendations to develop and improve the questions in these three textbooks. The analysis of textbook questions is highly important in achieving its educational objectives, and thus numerous analytical models are available for the cognitive domain. Among these models are those of Romberg, Wood, Begle, and Wilson as well as the taxonomy by Bloom.

1. Introduction

Any textbook should have a characteristic of cognitive development and creative thinking. This characteristic refers to the nature, relevance and level of learning activities included in the textbook. Activities given in the textbook are according to students' developmental level and the content is helpful in developing thinking skills in the students (Mahmood, 2011).

The Ministry of Education in Iraq pays due attention to the quality of education, in that, it is keen to improve and amend its content and approaches to cope with the requirements of the era. The interest of the Ministry is providing curricula, and textbooks in matter which approaching the international standards in terms of quality (Educational-Research-Centre, 2004).

A textbook includes philosophies, values, and principles that characterize the society teaching the curriculum in its contents (Alnajjar, 2002). Choosing the appropriate textbook for use in a science classroom is not an easy task. A textbook is an interpretation of the curriculum, guided by the world-views, values, and presuppositions of the authors (Leite, 1999). Therefore, the message of a textbook is neither neutral nor a faithful specification of any curriculum. Textbooks are also under the influence of constraints, such as economics and precedents set by states (Hubisz, 2003).

Textbook questions are one of the basic components contained in the textbooks that have significant importance for both students and teachers. According to Jo and Bednarz (2011), on one hand, the questions that address low-order level cognitive processes require teachers to *"ask a learner to repeat or recognize some information exactly as it was presented in lesson."* On the other hand, the questions that address

higher-order level cognitive processes require teachers to "*ask the student to mentally manipulate bits of information previously learned to create an answer, or to support an answer with logically reasoned.*"

Typically, the achievement in the school and higher order thinking skills among students are assessed using different forms of questions or tests. However, most of the items used in these assessments only focus on the level of knowing and thinking without any connection with higher order thinking skills. Hoeppel (1980) and Humblen (1984) found the objective of the question used in most educational levels overwhelmingly tap the lower understanding levels. Thus, if the test items used only lower level of thinking skills, students would not be able to develop and use their higher-order skills.

Questions, according to Aslan (2011), are parts of a textbook that openly interact with the student, and are directly posed to students. The thinking activity begins with the questions. However, only qualified and effective questions motivate students to exert intellectual effort. The importance of using higher-order qualified questions are as follows:

1. Improve students' reasoning skills and cognitive processes,
2. Encourage students to synthesize their own knowledge and experiences with what they learn at school,
3. Encourage students to improve their personal viewpoints and interpretation of a topic,
4. Create new fields of questioning in the minds of students, and
5. Ensure that the students can use other viewpoints.

(Aslan, 2011)

One of the important educational purpose of textbook questions is to stimulate the thinking skills and problem solving skills of students, whether these questions are verbally asked by teachers in the classroom or presented in textbooks (Jo & Bednarz, 2011).

Many educational effects are obtained from textbook questions, and these effects depend on how often these questions are used by individual teachers and in what way they are used. The importance of textbook questions according to Jo & Bednarz (2009) can be summarized as follows:

1. Improve students' understanding of content,
2. Assist students in identifying critical information in the textbook,
3. Help students to build strategies in processing given information, and
4. Stimulate students' problem solving skills.

One way to improve students' higher-order thinking skills is by using the questions in the textbook (Alul, 2000). The importance of the questions in each topic would be based on the importance of the evaluation process in teaching and learning. As the questions is to measure the achievements of the objectives topic, the questions should cover all these objectives. The questions are the teacher's instrument to achieve the educational goals, make students attain learning skills, and to make teachers recognize any difficulties faced by the students (Algobory & Alajrash, 2008).

All questions in textbooks can be classified into six levels of Bloom's taxonomy, this six lelels are: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation (Jo & Bednarz, 2011). This six levels also can be classified into two major categories: the lower levels (Knowledge and Comprehension)

and the higher levels (Application, Analysis, Synthesis, and Evaluation). Depending on the relationship between the level of student thinking (Low-order and Higher-order thinking skills) and the cognitive level of questions according to Bloom's taxonomy, students should be asked higher-order thinking skills questions to develop their student thinking skills (Jo & Bednarz, 2011).

The authors can refer to Bloom's Taxonomy in preparing questions in the textbook because this taxonomy is the most common classifications used in educational literature and previous studies. In addition, Bloom taxonomy is easily characterized which makes the educational process measurable and can improves content in the textbook. In this way, students can be tested with different types of questions according to Bloom's Taxonomy cognitive levels (Junoh, Muhamad, Abu, Jusoh, & Desae, 2012).

2. Problem statement

Considering the importance of questions, many studies have analyzed textbook questions in different subjects. However questions in Islamic education textbooks in Iraqi secondary schools are not as adequately analyzed as the other subjects (Algobory & Alajrash, 2008; Alshahri, 2008; Alul, 2000). There are studies that have been analyzed Islamic education textbook questions in different countries (Al-Ayasirah, 2004; Al-Sewidi, 2000).

Corresponding to the above discussion on the textbook question, this study is concerned with the analysis questions of Islamic education textbooks of secondary schools in Iraq according to the Bloom's taxonomy cognitive domain. Considering that the Islamic textbook questions are supposed to cover all levels of cognitive domain (Al-Sewidi, 2000) and Iraqi Islamic education textbooks questions are not exempted from this rule, an analysis of Islamic textbook questions is necessary to determine the extent that these questions measure cognitive domain. Based on this need, the researcher expresses the need to analyze the Islamic educational textbook questions of secondary schools in Iraq based on Bloom's taxonomy.

3. Objectives of the study

The objectives of the study are the following:

1- To analyze the Islamic's textbook questions of Iraq first grade secondary schools according to Bloom's taxonomy cognitive domain.
2- To analyze the Islamic's textbook questions of Iraq second grade secondary schools according to Bloom's taxonomy cognitive domain.
3- To analyze the Islamic's textbook questions of Iraq third grade secondary schools according to Bloom's taxonomy cognitive domain.

4. Research questions

1- What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) level percentage in Islamic educational textbook questions in the first grade of secondary schools in Iraq?
2- What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) level percentage in Islamic educational textbook questions in the second grade of secondary schools in Iraq?

3- What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) level percentage in Islamic educational textbook questions in the third grade of secondary schools in Iraq?

5. Results

The research questions would be answered based on the research results. The first , second and third research questions would be answered based on analysis checklists, the fourth research question would be answered based on interviewers form data.

A total of 226 questions were obtained from the three textbooks (1st, 2nd, and 3rd grade Islamic education textbooks in secondary schools in Iraq) after analyzing and classifying the frequencies. The questions were distributed among the three textbooks as shown in Table 1. In the 1st secondary Islamic education textbook, Chapter 1 Lesson 8 only had 3 questions, whereas Chapter 1 lesson 4 had a higher number of questions (11). In the 2nd secondary Islamic education textbook, Chapter 2 Lesson 3 only had 2 questions, whereas Chapter 2 Lesson 2 had 9 questions. In the 3rd secondary Islamic education textbook, Chapter 2 Lesson 3 had no questions (0), whereas Chapter 1 Lesson 5 had 7 questions.

Table 1: Frequencies and percentage of questions for each textbook.

Islamic Education Textbook	Chapter	Number of Questions per chapter	Number of Questions per textbook	Percentage (%)
1st secondary grade	Hadith	39	82	36.28%
	Serah	43		
2nd secondary grade	Hadith	43	71	31.42%
	Serah	28		
3rd secondary grade	Hadith	40	73	32.30%
	Serah	33		
Total		226	226	100%

However, a difference in the distribution of the questions in the three textbooks was noted. The 1st secondary Islamic education textbook had a higher number of questions than the 2nd and 3rd secondary Islamic education textbooks (as shown in Fig. 2).

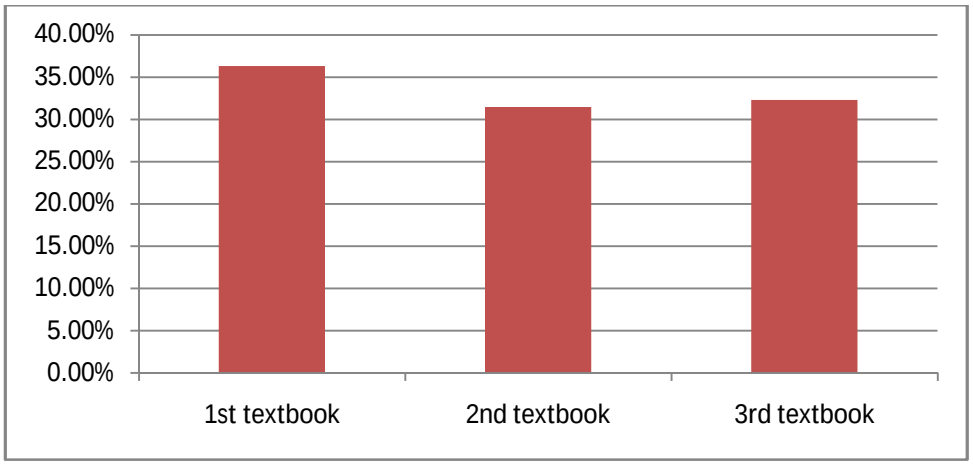

Fig. 2: Total percentage for each taxonomical level for the total questions in the three textbooks.

5.1 Analysis of questions

Question 1: What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) levels percentage in Islamic educational textbook questions in the first level of secondary schools in Iraq?

The examination of Tables 3 reveals differences in the distribution of the questions among the instructional chapters and lessons in the first level Islamic education textbook of secondary schools in Iraq.

Table 3: Frequencies and percentage for each taxonomic level in the 1st textbook.

Chapter	Lesson	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	Total Number of Questions
Chapter one (Hadith)	1	0	3	0	0	1	0	4
	2	4	1	0	0	0	0	5
	3	1	3	0	0	0	0	4
	4	5	6	0	0	0	0	11
	5	0	1	1	0	1	0	3
	6	0	3	0	0	0	0	3
	7	0	2	0	0	1	0	3
	8	3	0	0	0	0	0	3
	9	3	0	0	0	0	0	3
Subtotal 1		16	19	1	0	3	0	39
%		41.03%	48.72%	2.56 %	0%	7.69%	0%	100%

Chapter Two (Serah)	1	3	4	0	0	0	0	7
	2	4	1	0	0	0	1	6
	3	3	1	0	0	0	1	5
	4	1	3	0	0	0	0	4
	5	6	0	0	0	0	0	6
	6	4	2	0	0	1	0	7
	7	3	5	0	0	0	0	8
Subtotal 2		24	16	0	0	1	2	43
%		55.81%	37.21%	0%	0%	2.33%	4.65%	100%
Total		40	35	1	0	4	2	82
%		48.78%	42.68%	1.22%	0%	4.88%	2.44%	100%

Tables 3 clearly show a difference in question distribution among the levels in each chapter and lesson in the textbooks. Several levels in some lessons had no questions, whereas others had a large number of questions. The questions in the (Application, Analysis, Synthesis, and Evaluation) levels ranged from 0 to 4 in the textbook.

The number of questions in the (Knowledge and Comprehension) levels ranged from 35 to 40. As a result, a difference in the distribution of the questions across Bloom's cognitive levels in two chapters in the textbook was noted as shown in Figure 2.

Examination of the individual textbooks revealed more accurate results. The highest number of questions in the 1st textbook was in the (Knowledge) level, with a total of 40 questions, followed by (Comprehension) with 35 questions. (Synthesis) had 4 questions, (Evaluation) had 2, (Application) had 1, and (Analysis) had 0 questions.

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Table 3 shows that (Knowledge) level had a percentage of 48.78% of the total questions presented in the 1st textbook. (Comprehension) level had 42.68% followed by (Synthesis) with 4.88%. The (Evaluation), (Application), and (Analysis) levels had 2.44%, 1.22%, and 0%, respectively. This result is illustrated in Fig. 3.

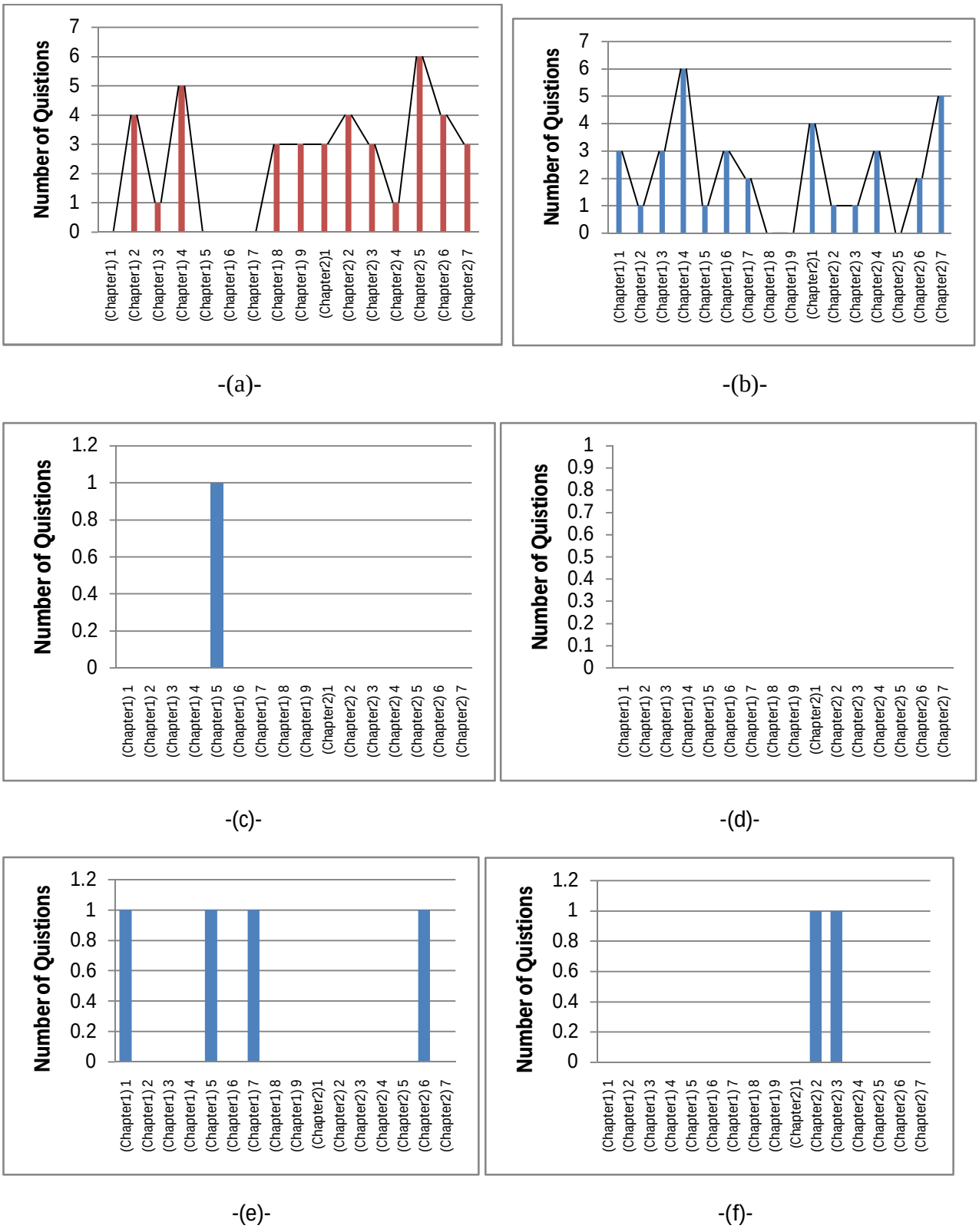

Fig 2 Difference in the distribution of the questions across Bloom's cognitive levels (a-Knowledge, b-Comprehension, c-Analysis, d-Application, e-Synthesis, and f-Evaluation) in two chapters in the 1st textbook.

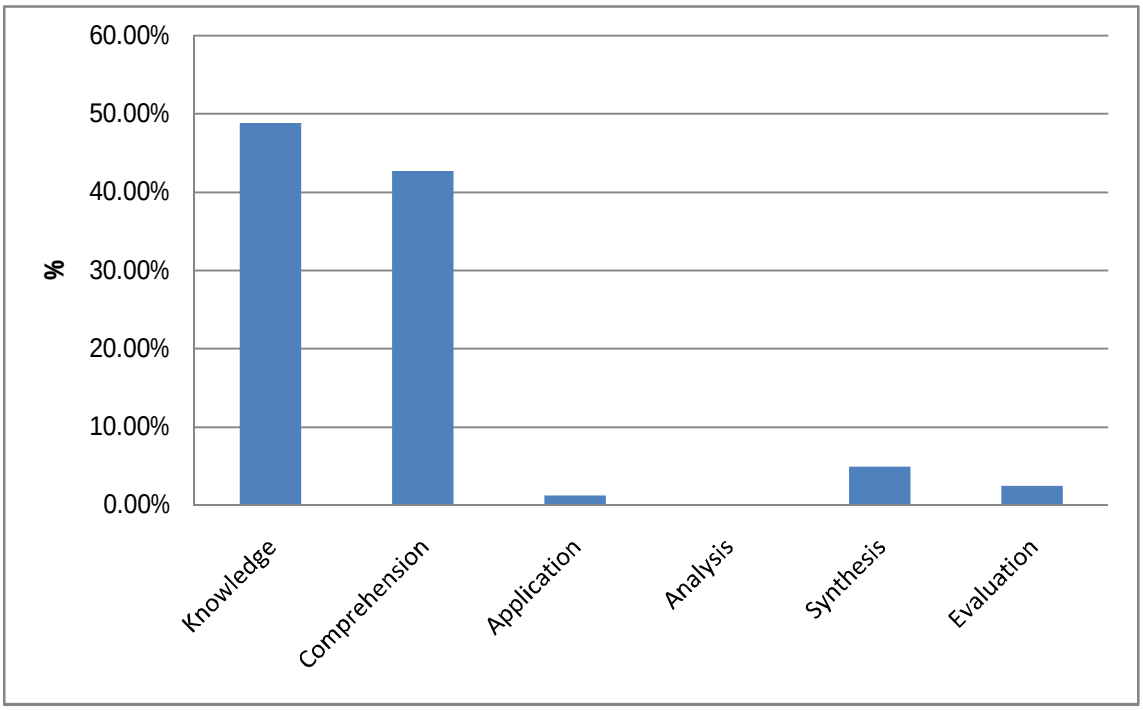

Fig 3 Percentage of cognitive levels of 1st grade secondary schools Islamic educational textbook questions in Iraq.

Question 2: What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) levels percentage in Islamic educational textbook questions in the second level of secondary schools in Iraq?

The examination of Tables 4 reveals differences in the distribution of the questions among the instructional chapters and lessons in the second level Islamic education textbook of secondary schools in Iraq.

Table 4: Frequencies and percentage for each taxonomic level in the 2nd textbook.

Chapter	Lesson	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	Total Number of Questions
Chapter one (Hadith)	1	2	2	0	0	0	0	4
	2	1	2	0	0	0	0	3
	3	1	4	0	0	0	0	5
	4	1	3	0	0	0	0	4
	5	1	3	0	0	0	0	4
	6	2	2	0	0	0	0	4

	7	4	1	0	0	0	0	5
	8	0	2	0	0	1	0	3
	9	2	5	0	0	0	1	8
	10	3	0	0	0	0	0	3
Subtotal 1		17	24	0	0	1	1	43
%		39.53%	55.81%	0%	0%	2.33%	2.33%	100%
Chapter Two (Serah)	1	3	0	0	0	0	0	3
	2	9	0	0	0	0	0	9
	3	1	1	0	0	0	0	2
	4	2	2	0	0	0	0	4
	5	2	2	0	0	0	0	4
	6	2	1	0	0	0	0	3
	7	2	1	0	0	0	0	3
Subtotal 2		21	7	0	0	0	0	28
%		75%	25%	0%	0%	0%	0%	100%
Total		38	31	0	0	1	1	71
%		53.52%	43.66%	0%	0%	1.41%	1.41%	

Tables 4 clearly show a difference in question distribution among the levels in each chapter and lesson in the textbooks. Several levels in some lessons had no questions, whereas others had a large number of questions. The questions in the (Application, Analysis, Synthesis, and Evaluation) levels ranged from 0 to 1 in the textbook.

The number of questions in the (Knowledge and Comprehension) levels ranged from 31 to 38. As a result, a difference in the distribution of the questions across Bloom's cognitive levels in two chapters in the textbook was noted as shown in Figure 4.

The results were slightly different for the (Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation) level percentages in the Islamic educational textbook questions in the 2nd level of secondary schools in Iraq. The textbook had a lower number of questions compared with the 1st textbook. The (Knowledge) level had 38 questions followed by the (Comprehension) level with a total of 31 questions. The (Synthesis) and (Evaluation) levels had only one question, and the (Application) and (Analysis) levels had zero questions.

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Fig. 5 shows a plot of the results. The plot reveals that 53.52% of the questions were for (Knowledge), 43.66% was for (Comprehension), 1.41% was for (Synthesis) and (Evaluation), and 0% was for (Application) and (Analysis).

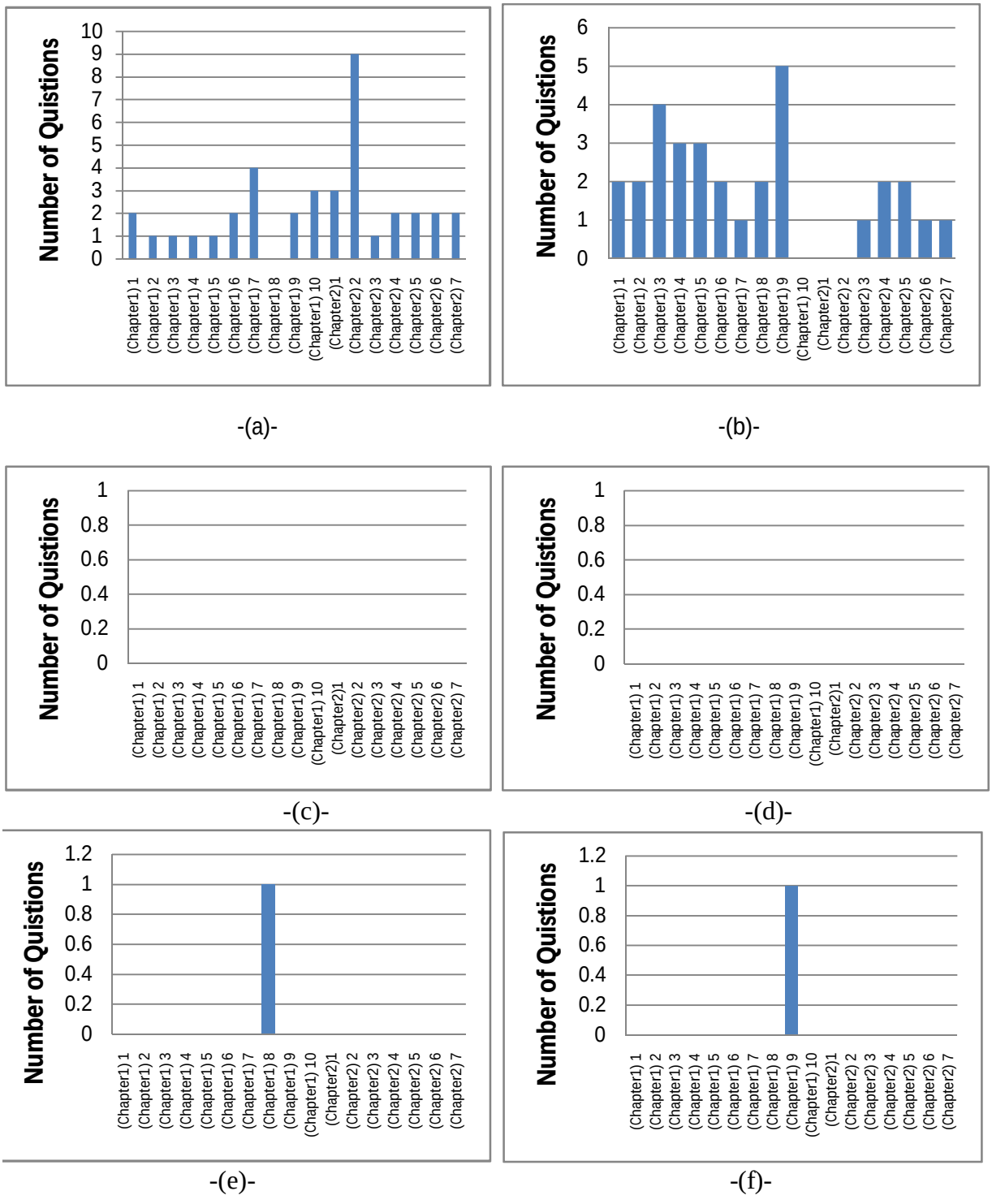

Fig 4 Difference in the distribution of the questions across Bloom's cognitive levels (a-Knowledge, b-Comprehension, c-Analysis, d-Application, e-Synthesis, and f-Evaluation) in two chapters in the 2nd textbook.

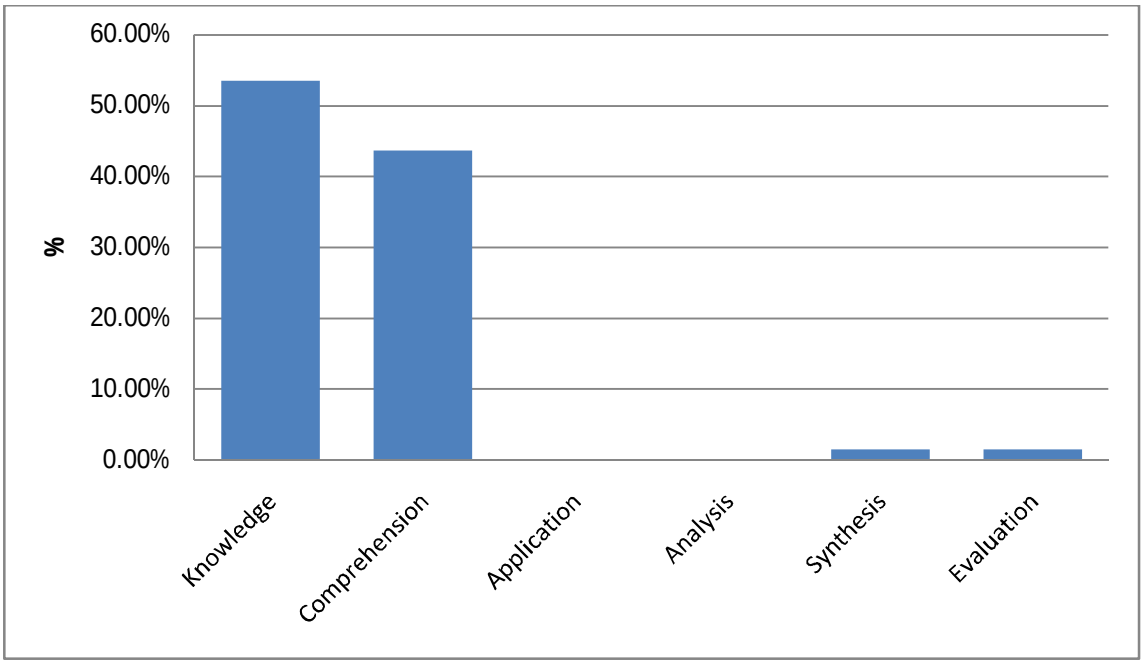

Fig 5 Percentage of cognitive levels of 2nd grade secondary schools Islamic educational textbook questions in Iraq.

Question 3: What is the (knowledge, comprehension, application, analysis, synthesis and evaluation) levels percentage in Islamic educational textbook questions in the third level of secondary schools in Iraq?

The examination of Tables 5 reveals differences in the distribution of the questions among the instructional chapters and lessons in the third level Islamic education textbook of secondary schools in Iraq.

Table 5: Frequencies and percentage for each taxonomic level for the 3rd textbook.

Chapter	Lesson	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	Total Number of Questions
Chapter one (Hadith)	1	2	2	0	0	0	0	4
	2	3	1	0	0	0	0	4
	3	1	2	0	0	0	0	3
	4	4	1	0	0	0	0	5
	5	5	1	0	0	0	1	7
	6	5	1	0	0	0	0	6
	7	1	3	0	0	0	0	4

	8	2	2	0	0	0	0	4
	9	1	1	0	0	1	0	3
Subtotal 1		24	14	0	0	1	1	40
%		60%	35%	0%	0%	2.5%	2.5%	100
Chapter Two (Serah)	1	4	2	0	0	0	0	6
	2	2	0	0	0	0	0	2
	3	2	3	0	0	0	0	5
	4	0	0	0	0	0	0	0
	5	3	1	0	0	0	0	4
	6	3	1	0	0	0	0	4
	7	1	2	0	0	0	0	3
	8	3	2	0	0	0	0	5
	9	3	1	0	0	0	0	4
Subtotal 2		21	12	0	0	0	0	33
%		63.64%	36.36%	0%	0%	0%	0%	100
Total		45	26	0	0	1	1	73
%		61.64%	35.62%	0%	0%	1.37%	1.37%	100

Tables 5 clearly show a difference in question distribution among the levels in each chapter and lesson in the textbooks. Several levels in some lessons had no questions, whereas others had a large number of questions. The questions in the (Application, Analysis, Synthesis, and Evaluation) levels ranged from 0 to 1 in the three textbooks.

The number of questions in the (Knowledge and Comprehension) levels ranged from 26 to 45. As a result, a difference in the distribution of the questions across Bloom's cognitive levels in two chapters in each textbook was noted as shown in Figures 6.

The distribution of the (Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation) level percentages in the Islamic educational textbook questions in the 3rd level of secondary schools in Iraq was the most even of all despite having the least number of questions among the three textbooks. The (Knowledge) level had 45 questions followed by the (Comprehension) level with 26 questions. The (Synthesis) and (Evaluation) levels had only 1 question, and the (Application) and (Analysis) levels had 0 questions.

The (Knowledge) level had 45 questions (61.64%) followed by the (Comprehension) level with 26 questions (35.62%). The (Synthesis) and (Evaluation) levels had only 1 question (1.37%), and the (Application) and (Analysis) levels had 0 questions (0%). The results are shown in Fig. 7.

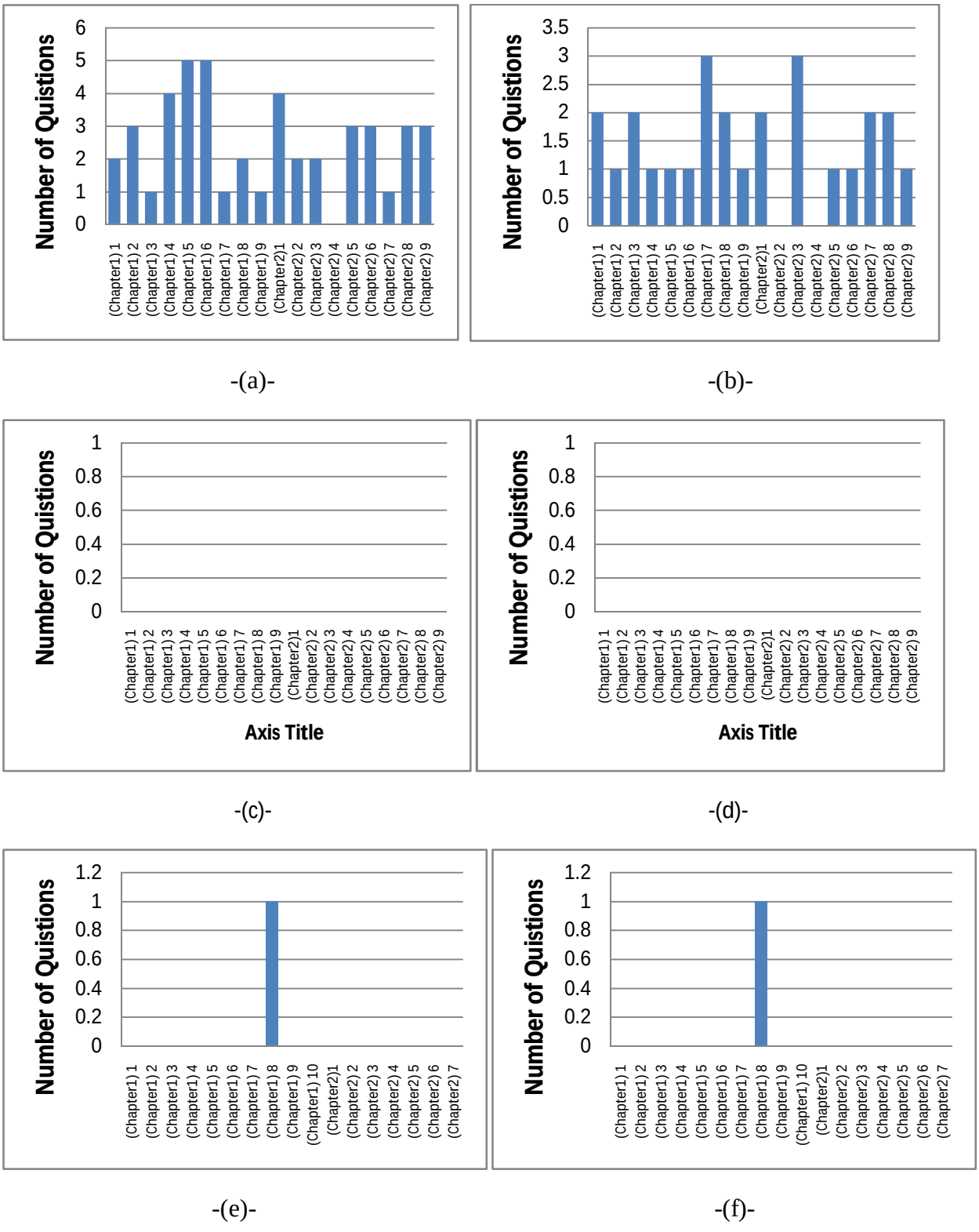

Fig 6 Difference in the distribution of the questions across Bloom's cognitive levels (a-Knowledge, b-Comprehension, c-Analysis, d-Application, e-Synthesis, and f-Evaluation) in two chapters in the 3rd textbook.

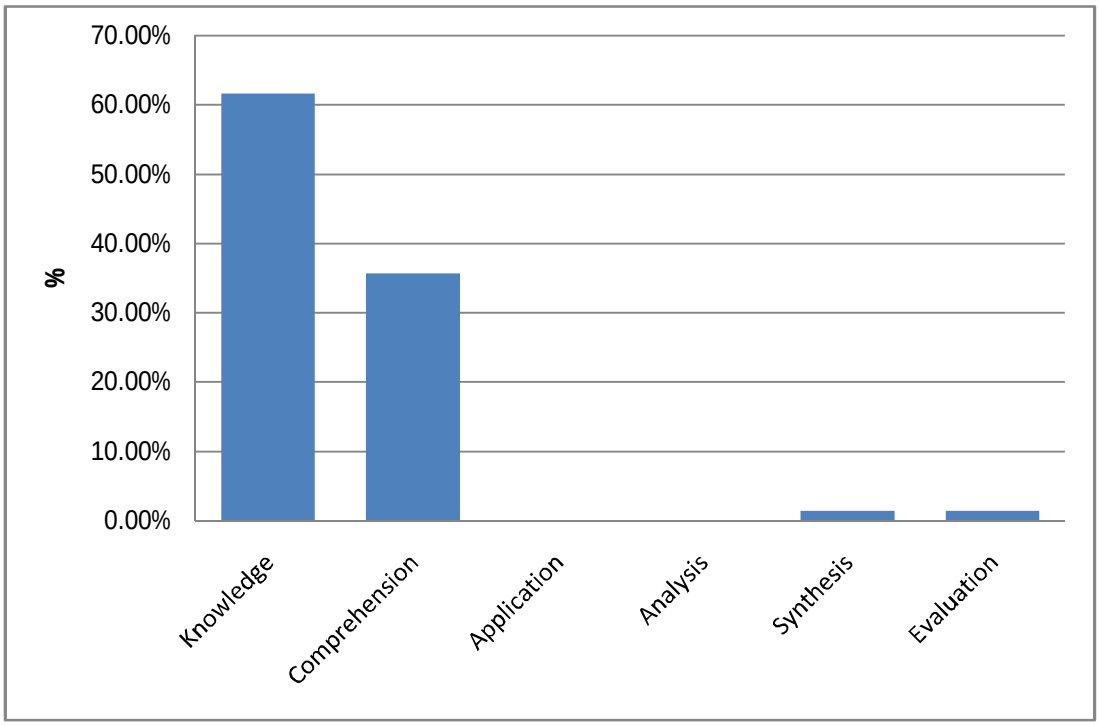

Fig 7 Percentage of cognitive levels of 3rd grade secondary schools Islamic educational textbook questions in Iraq.

6. Summary

The present study is the first attempt in Iraq to analyze Islamic educational textbook questions in secondary schools as a researcher's information. This study is hoped to be a helpful aid to researchers and curriculum designers at the Ministry of Education in Iraq. Iraqi curriculum planners and developers may also find effective educational ideas in this study by introducing different levels of questions and activities in their planning of the new Iraqi curriculum and textbooks. Improving the curriculum tends to develop the educational process for students and teachers. Results show that the (Knowledge and Comprehension) question level is (High) and (application, analysis, synthesis and evaluation) question level (very Low) in Islamic educational textbooks' questions in secondary schools in Iraq. In the light of the study results in checklist and reviewers form, the researcher recommends the questions employed in the Islamic educational textbooks for secondary schools in Iraq should be improved to cover the six cognitive levels of Bloom's Taxonomy.

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