بازنمایی بحران‌ها در کتاب‌های درسی دوره آموزش عمومی؛ مطالعه‌ای مبتنی بر تحلیل محتوا

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Representation of Crises in Coursebooks of the Public Education System: A Study Based on Content Analysis

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Abstract:

The purpose of this research is to analyze how crises are represented in elementary and high school textbooks through a content analysis method. In the first step, the basic concepts related to this topic were extracted from Iranian and international scientific and legal documents deductively. Then, 68 extracted concepts were put into 12 categories and were sent to the field experts in the form of a questionnaire. The reliability coefficient of the questionnaire was computed.88 with Cronbach's Alpha. The extracted categories were again offered to some field experts and validated. Based on confirmed categories, the content of textbooks (28 titles) and teacher's guidebooks (12 titles) were analyzed. The results of analyzing the textbooks show that the main focus is first on the issue of crisisology and the consequences of crises, and second, on preventive actions which encompass%80 of the content. The remainder of the related content was concerned with other topics; the contribution of the content that focused on resiliency and recovery is less than other concepts. The comparison of the weights allocated by the experts and the weights gained from the textbooks analysis was made by Mann-Whitney U and Chi-square tests; in both tests, a meaningful difference was observed.

Keywords: Crisis, Environmental Hazards, Content Analysis, Resilience, Recovery.

چکیده:

هدف از پژوهش حاضر، بررسی نحوه بازنمایی بحران‌ها در کتاب‌های درسی دوره ابتدایی و متوسطه به روش تحلیل محتوا بود. در مرحله اول پژوهش با رویکرد قیاسی، مفاهیم اساسی مرتبط با این مبحث از مستندات علمی و قانونی داخلی و خارجی استخراج گردید. سپس ۶۸ مفهوم استخراج‌شده در ۱۲ مقوله کلی دسته‌بندی و در قالب یک پرسشنامه در اختیار متخصصان موضوعی قرار گرفت. پایایی پرسشنامه با روش آلفای کرونباخ، ۰/۸۸ محاسبه شد. مقوله‌های استخراج‌شده مجدداً در اختیار تعدادی متخصص موضوعی قرارگرفته و اعتبارسنجی شدند. بر اساس مقوله‌های تأییدشده، محتوای کتاب‌های درسی (۲۸ عنوان) و راهنمای معلم (۱۲ عنوان) تحلیل شدند. نتیجه تحلیل کتاب‌های درسی نشان داد که عمده توجه در مرتبه اول به مقوله بحران‌شناسی و پیامدهای بحران‌ها و در مرتبه دوم، اقدامات پیشگیرانه است که ۸۰ درصد از محتوا را تشکیل می‌دهد. باقیمانده محتوای مرتبط به سایر مباحث اختصاص دارد و سهم محتوای معطوف به تاب‌آوری و بازیابی کمتر از سایرین است. مقایسه وزن‌های تخصیص داده‌شده توسط متخصصان و وزن‌های به‌دست‌آمده از تحلیل کتاب‌ها با روش U مان- ویتنی و کای اسکوئر انجام شد که در هر دو آزمون، تفاوت معناداری مشاهده شد.

واژه‌های کلیدی: بحران، مخاطرات محیط‌زیستی، تحلیل محتوا؛ تاب‌آوری؛ بازیابی.

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Introduction

In the general courses of centralized educational systems, coursebooks are the realization of approved (intended) curricula in addition to a reflection of the educational system's macro-policies (Dehghani, 2017), which means that

coursebooks, in addition to transferring knowledge, reflect both implicitly and explicitly, a nation's and their

government's ideals, goals, culture, and, to sum up, their concerns. Coursebooks, as educational media (Fardanesh, 2006) are the most important agenda for teachers and students. In addition to textbooks, which mainly target students, teacher's guides also play an important role in implementing the curriculum. According to Ravitch (2003), Valverde, Bianchi, Wolfe, Schmidt, and Houang (2002, as cited in Okeeffe, 2013), coursebooks play a fundamental role in shaping students', teachers' and families' attitudes toward school subjects and curricula. Accordingly, the extent to which and the manner in which coursebooks and teacher's guides deal with different subjects show the significance of those subjects in the curricula and the educational system as well as at the macro-level of the society.

Social and political events and crises are among the important issues that affect the global community and our own country (Islamic Republic of Iran), which create numerous challenges on the way to sustainable development and advancement. The word *crisis* refers to a situation that threatens and endangers human life. This situation is also known by other names, such as emergency conditions, disaster, and catastrophe. By *disaster*, we mean a sudden and shocking incident, with the occurrence of which, normal patterns of life are destroyed, and the people and communities involved will begin to have numerous needs. A catastrophe

normally happens when people die, the property is destroyed, and social systems are disrupted (Mirzaee & Barati, 2005, as cited in Ali-Asghari, 2009). Crises, especially acute ones, are an unavoidable topic in social, educational, and governmental systems because they deal with human life and affect the life and survival of the society.

Natural and man-made crises and disasters have occurred since the beginning of history (Rabiee & Hosseini, 2013; Bromley & Andina, 2010). But they have considerably increased in the 21st century so that based on estimates, about 217 million people are annually affected only by natural disasters (Dass-Brailsford, 2016). In the past, crises chiefly originated from actions and reactions in the earth or took place as a result of wars and battles. Today, however, social and cultural crises have begun to be as dangerous as the natural ones. An unprecedented increase in the numbers, diversity, severity, and extent of hazardous incidents and crises in the last 100 years confirms man's failure to learn from history and experiences and an expansion in the scope of the consequences of incidents (Paton, 2016).

Iran is a country in which many incidents happen, and the number, severity, and extent of these incidents have become one of Iranians' daily concerns. Iran, with an area of about 1,640,000 square kilometers and with its geographical and climatic diversity, has experienced numerous and vast natural and man-made incidents. Rabiee and Hosseini (2013) have listed 26 natural incidents and crises which threaten Iran.

The most important of them are earthquakes, tsunamis, hurricanes, droughts, floods, and epidemics. Iran encompasses one percent of the entire world population, but 30 types of the 41 known natural incidents on earth happen in this country and based on statistics, our country is resided by nearly six percent of

the people in the world who die in these incidents (Pourmosavi et al., 2013). The fact that Iran has a special strategic and geopolitical situation, that it is located in the belt of natural crises and that it is earthquake-prone (Seidaee, Qaareh-Nezhad, & Firozi 2011, as cited in GoliMokhtari et al., 2018), and that it is diverse in terms of climate and weather conditions have all brought about various economic and non-economic losses (Babakhani et al., 2013); this situation has placed Iran among the first eight countries in the world which enormously suffer from natural disasters and are particularly subject to different crises (Noorbala, 2006, as cited in Ali-Asghari, 2009). This situation has been leading to a high rate of mortality and great mental, physical, and economic suffering among people.

Crises are either natural or man-made. Natural crises result from the actions and reactions of the environment and are outside human control, while man-made crises are the result of people's intentional actions and interferences in the environment. Crisis consequences require us to take decisive actions to make people aware of crises and ready for confronting them, to prevent and confront crises, to use different methods and tools to reduce the profound and lasting effects and damages caused by such incidents, especially the natural ones, and to increase resiliency.

Resiliency is the result of the combination of three factors, namely beliefs, skills, and supports (Mousa-Zadeh et al., 2017) and different organizations and institutes should strive to establish, develop, and help flourish Resiliency. One of the important responsible organizations and institutes in this field, especially for the second factor (skills), is the educational system of a country. In any country, the educational system preceding the higher education, as an organ accountable for its decisions and actions, has certain duties regarding crises, just as other organs and

people do. The above-mentioned system is responsible for the important task of training and educating people in such a way that they will develop religious, emotional, and behavioral capabilities in accordance with the society's needs (IRI's Supreme Council for Cultural Revolution, 2011) and will enhance their capacities to continue living and in other words Resiliency in emotional, social, and other challenges faced in everyday life (Mousa-Zadeh et al., 2017). For this goal, the educational system should take different circumstances and its requirements into consideration and design some plans and provide some tools to pave the ground for the preservation of humans and the environment against crises. Enriching the educational material and coursebooks relevant to the origin, occurrence, and aftereffects of crises can increase students' preparedness, decrease repercussions, and facilitate and accelerate the improvement and recovery procedure. Coursebooks not only serve as sources for learning but also as the curriculum content.

Despite the importance of the issue of *crisis* (of the acute and urgent type) in human life, few types of research have been conducted, especially on the issues relevant to the educational system covering this topic, and they can be regarded as neglected subjects. Focusing on the analysis of the educational content of books, the researchers studied the scholarly review on the subject, yet no research was observed to have addressed this domain directly. Nevertheless, in some researches, certain topics relevant to the issue of crisis, such as duties related to citizenship, have been studied.

Gholtash, Yar-Mohamadian, Foroghi-Abri & Mirshah-Jafari (2010) have studied the position of the progressive approach to citizenship education in the elementary curriculum and in a part of their study, they analyzed coursebooks including social sciences (History, Geography, and Civics), Reading & Writing, Islamic Studies, and the

teacher's guide books relevant to these courses and the educational objectives these books. The result of their study suggests that relatively only a little portion of progressive citizenship training aims have been covered and that scant regard has been paid to the elements of progressive citizenship training in both the studied coursebooks and the related teacher's guide books.

Gholtash, Salehi, and Mirzaie (2012) studied the features of a global citizen in the coursebooks of Social Sciences and their teacher's guides for the elementary level through content analysis and concluded that the three aspects of cognitive, operational, and attitudinal in addition to the book images have gained scant attention as a whole. Moreover, the content of the relevant coursebooks has addressed these elements and aspects below the standard level of expectation.

Conducting a comparative study of five countries (Iran, America, England, Russia, and Australia), NaseriJahromi, Marzooghi, Karbasian, Torkzadeh, and Mohammadi (2015) studied the curriculum regarding the topic of *passive defense*. In a part of the study, the collected data were analyzed based on the nine elements of the curriculum and the content relevant to the elements using the content analysis method.

Zahabion, Yoosefi, and Yar Mohammadian (2016) analyzed citizenship training concepts in the coursebooks of Sociology in the secondary educational system. The analytical approach used was quantitative, and the amount of attention to three components of citizenship in the four books regarding the topics of Sociology and Social Sciences were identified and analyzed; it was concluded that the amount of attention was significantly different across the grades and coursebooks.

Burde et al. (2016), having systematically studied the articles published regarding education in critical situations, concluded that providing structured, meaningful, and innovative activities for children who are living in emergency and post-emergency situations in an institutional setting or in informal learning environments can improve their emotional and behavioral health. Thus, the educational system is directly responsible for addressing crises and emergency conditions.

SaalehiOmran, AbediniBeltork, and MehralitabarFiroozjaa'i (2018) analyzed elementary level coursebooks from the viewpoint of the amount of attention to components of *new energy* based on Shannon's entropy method, concluding that regarding new energies, the most amount of attention has been focused on solar energies and the least to tidal, geothermal, and wave energies. The innovation of this research is about addressing the topic of new energies as an environmental issue and related to sustainable development.

Ahghar and Eftekhari (2016) analyzed components of citizenship training in the Social Sciences coursebook of the eighth grade based on Shannon's entropy model. According to this study, among the 2160 concepts related to citizenship training in the above-mentioned coursebook, three components of citizenship, namely ability, attitude, and knowledge, have had the most frequency and penetration rate in the book, and the other components have received insufficient attention.

Parishani, MirshahJafari, Sharifian, and Farhadian (2018) studied the manner in which environmental issues have been included in the first-grade coursebooks of the Iranian educational system, following which, they extracted and prioritized the neglected topics. The first part of the study (the manner in which the topics were covered) was carried out using the qualitative design, where the interviews with related specialists were

analyzed, while the second part (prioritizing the neglected topics) was conducted using the quantitative design, administering a survey of teachers of the courses related to environmental concepts. The researchers finally concluded that three topics had been neglected most in comparison to others: protection of the country's natural environment; social, economic, and environmental consequences resulting from the production of energy from renewable sources; and, finally, environmental repercussions arising from the use of fossil fuels. Adeyemi (2018) studied the manner in which the curriculum regarding the topic of training citizens has been being implemented in the higher secondary schools, where the researcher analyzed the related coursebooks and administered a survey of teachers, students, and educational facilitators in the schools of the Osun province in Nigeria. The conclusion indicates that there has been insufficient satisfaction with the citizenship training material, its correspondence with the educational course, and the manner in which it has been being taught and the way the curriculum has been implemented for the students and by teachers of this course.

In the present research effort, the manner in which Iranian coursebooks and teacher guides have addressed crises and natural or other disasters, like earthquakes, floods, storms, and wars have been the subject of the study.

The significance of the study lies in the fact that it is directly related to humans' life and survival and the educational system in the best waylays the foundations for helping people to develop preparedness, the power of self-defense, resiliency, and rebuilding a normal life both against crises and acute disasters and following their occurrence. The present research is aimed at answering the following questions:

1. How do the coursebooks design for general education (both elementary and secondary) address crisis issues?

2. To what extent does the material used in the coursebooks address the preparation of students required preceding the occurrence of crises?

3. What kinds of information are students provided by the coursebooks to face the conditions following the occurrence of crisis conditions?

Research Methodology
A common method used for the studying of coursebooks is content analysis, which is conducted during the three stages of preparation and organization, examining material, and reporting results.

The approach adopted in this research is deductive. There is no definite theory in the literature regarding a syllabus that contains certain concepts in critical situations. Therefore, identifying relevant components and analyzing based on them are essential. To this aim, more than thirty sources, including essays, research reports, and relevant books, were studied. Then, the integral components which corresponded with the research premises were identified. The booklets and guides related to INEE (2012) and NUISDER (2007, 2015[a], 2015[b]) are among the sources contributing to education and training in critical situations, which were also used frequently in the present work. Accordingly, 68 relevant concepts or categories were identified as bases for the study. In order to facilitate the analysis process and according to thematic affinity, these 68 concepts were categorized into 12 general categories (components). A questionnaire was designed and administered to the related experts in order to assess the validity of the identified categories (components). These experts were experienced in training, upbringing, designing syllabi, crisis management, and psychology. The experts had experience in research and teaching crisis issues, designing and developing syllabi, authoring coursebooks, or acting as rescuers in critical situations. The

selection of the respondents was conducted using the purposive technique and the snowball sampling method. The above-mentioned questionnaire consisted of several items: list of components, their relevancy or irrelevancy, request for introducing important new categories (components), and category weight, which is presented if its relevancy is verified. A complete list of categories and subcategories were also administered to these experts in addition to the questionnaires. Questionnaires on the validity of the assessment of the categories were sent to 26 experts, 12 of whom (equivalent to 46%) answered them. The answers were put under initial analysis, and internal consistency coefficient (Cronbach's alpha) was calculated more than 88/0 for ten questions, which is an appropriate coefficient of minimum reliability. As the items of the questionnaire were weighted from 1 to 10, the number 5.5 was chosen for one item, and the sum of the scoring by the 12 evaluators was calculated as 60.5 as the cut-off point, and those items with weighting averages higher than this point were chosen, which in fact included all the items. Since the experts were asked to introduce other important categories, too, 13 new ones were introduced by them. Out of the above categories, those upon which at least three evaluators agreed were added to the list of the categories. Overall, the following categories were taken into consideration as components and indicators for the analysis. The unit for the recording of words, terms, images, assignments, and fields were the pages of the coursebooks. The reported data are based on counting crisis-related terms and concepts, including the repetitions, which means that, e.g., if terms like "earthquakes" or "relief organizations" were written on several pages of the coursebook, these repeated words were also counted. For this reason, the above-mentioned statistics are higher than those reported in Table 4. In order to determine the final categories as the basis for analyzing the coursebooks, the scholars' opinions collected were administered to a number of experts on syllabus design having experienced critical situations. The final identified categories are reported in Table 1.

In the second stage, the coursebooks and the teacher's guides (the same books selected in the first stage) were studied and analyzed based on the identified categories. The research community consisted of the coursebooks and the teacher's guides related to the general education course which included the levels of the primary school, the first phase of the secondary school, and the second phase of the secondary school, designed and compiled, in 2017, by the Office for Designing and Authoring Coursebooks, as a branch of the Organization for Educational Research and Planning, whose electronic version is available on the official website of the organization.

Sampling was done purposively based on the subject-content affinity of the books to be selected with the subject of the research. The researchers found a few books, such as *OlumTajrobi [Empirical Sciences], Motale'aat-e Ejtemaa'i [Social Studies], JoghrafiyayeOstan-ha [Provincial Geography], AmadegiDefaee [Defense Training], and Adabiat Farsi [the Persian literature],* whose titles seemed to make them more relevant to the topic of the study, whether directly or indirectly. Overall, 28 coursebooks of the general education course (from the first grade of the elementary to the end of the secondary levels) and 13 teacher's guides were studied.

Table 1. List of Components Related to the Concepts Relevant to Crises in Coursebooks of the General Education Course

Category code	Subcategories	Earned weight	Categories	Row
A	All varieties of disasters & crises; Consequences of each crisis; Stages of crises (from arising to ending); Threats and opportunities related to crises and disasters	0.84	Crisisology & consequences of crises	1
B	Informing; Evaluating preparedness for crises; Environmental protection; Preparedness maneuvers	0.94	Preventive measures	2
C	Immediate actions at the time of the incident; informing individuals at the onset of the crisis; Utilizing ICT; Making use of radio & TV; Introducing and recognizing relief organizations; Designing and executing evacuation plans; Supplying primary needs of injured people (food, clothes and safety); Debris removal and searching for missing people; Methods of helping and rescuing the injured; Quashing rumors & superstitions	0.94	Measures during the crisis (including primary coping measures)	3
D	Paying attention to individual differences; Context-sensitiveness, age and growth levels; Acclimatizing to cultural, social and linguistic contexts; Responding to students' needs	0.75	Adapting plans and measures to the conditions and needs of crisis-stricken people	4
E	Participation of all sectors (social entities) or related departments; Fostering teamwork in order to reduce problems; Participation of children and adolescents (students) in activities; Encouraging peer support; Public participation and mutual learning; Defining roles for students, teachers, school boards and families; Encouraging people to take responsibility; Introducing public and social campaigns (related active NGOs); Engaging parents; The role of school boards in fostering public participation in order for schools to resume their activities	0.87	Collective participation (social assistance) to overcome crises	5
F	Children's needs, capabilities, and capacities; Senior students' helping juniors; Using well-trained children to teach members of the society	0.81	Students' agency and role-playing	6
G	Taking care against contagious and viral diseases; Paying attention to the consequences of crises, such as PTSD; Composure; giving hope for a better life; Motivating crisis-stricken people; Psychological protection of individuals (psychological health: Maintaining self-esteem, self-confidence, self-control, and self-direction); Techniques for solving conflicts; The supportive role of teachers; Communication skills; Fulfilling psychological needs of crisis-stricken people	0.79	Physical and psychological health supports and interventions	7
H	Supporting vulnerable groups, such as the disabled; Preventing disputes; Promoting peace; Declaring the rights of crisis-stricken people; Elimination of discrimination; Social commitment to education; Taking into consideration deterrents to education, like poverty; Protecting the local & mother tongue; Social (public) supports; Fighting against sexual abuse, bullying & exploitation	0.83	Individual and social rights of crisis-stricken people	8
I	Innovation in interventions	0.66	Continuity of education; innovation in order to overcome physical and material challenges	9
J	Documentation of events	0.68	Documentation of events and measures and gaining advantage from similar experiences	10
K	Local and global past experiences in the face of crises	0.33	-	11

Research Findings

The first question of the research was as follows: How have the coursebooks of the general education course (the elementary and secondary levels) and the teacher's guides addressed the crisis? The analysis of the books shows that in the first and second grades of the elementary school, the issue of crises has not been directly addressed, where the most frequently addressed issues are the maintenance of personal health and well-being. However, in the first grade book *OlumeTajrobi [Empirical Sciences]* (p. 24), there is a brief reference to the issues of safety and the formation of safety and emergency aid service agencies (fire departments, medical emergency services, and Red Crescent/Cross societies), and the teacher was asked to teach skills related to safety, prevention, and observing rules. In the second grade book, almost nothing had been raised about crises and other related topics, but from the third grade onwards, crises were addressed both directly and indirectly in their various forms. For example, on p. 25 of the second grade *Farsi*, the story 'The Crystal Fish Bowl,' concerns a girl living in a fishbowl. One day, her fishbowl (her home) is destroyed by a storm. Her friend, spruce, helps her to find a new home and live in it. The addressing of concepts such as "storm" and "home destruction" can be considered as a representation of the issue of crisis, and "helping others to make a new home" can be a representation of "collective participation to overcome a crisis." In 28 coursebooks, 238 pages were devoted to the topic of crises and other related concepts. In addition, in four analyzed coursebooks including *OlumeTajrobi [Empirical Sciences]* of the ninth grade, *AmadegiDefaee [Defense Training]* of the tenth grade, *TahlilFarhangi [Cultural Analysis]* of the eleventh grade, and *Din vaZendegi [Religion and the lifestyle]* for the primary school in spite of subject affinity,

there is no direct or indirect reference to the topic of crisis. The number of the analyzed coursebooks (by grade and the content) is reported in Table 2, and the number of the analyzed guidebooks of the teachers is reported in Table 3.

The conditions, according to which the discussions in the coursebooks related to the topic of the research have been presented are summarized in Table4.

Alongside the concepts directly related to the concept of crisis, there are some other concepts discussed in the coursebooks indirectly related to this issue.

Table 2. The Number of the Analyzed Coursebooks

Coursebooks			
Level	Grade	Major	Number of Books
Elementary	First	-	1
	Second	-	1
	Third	-	2
	Fourth	-	2
	Fifth	-	2
	Sixth	-	1
Secondary level	Seventh	-	1
	Eighth	-	2
	Ninth	-	3
	Tenth	Common to Several Majors	5
		The Humanities and the Islamic Studies	1
	Eleventh	The Humanities	1
		Literature & The Humanities-Islamic Studies	1
		Common to Several Majors	2
	Pre-University Level	The Humanities	1
		Empirical Sciences	1
		Common to Several Majors	1

Table 3. Number of the Analyzed Teacher's Guides

Teacher's guides		
Level	Grade	Number of Books
Elementary	First	1
	Second	1
	Third	2
	Fourth	1
	Fifth	1
	Sixth	1
Secondary level	Seventh	1
	Eighth	1
	Ninth	2
	Tenth	1

For example, *MotaleatEjtemaee [Social Studies]* for the ninth grade dealt with topics such as the environment, the importance of protecting the environment and the role of the environment, the importance of protecting the environment and the role of the Department of the Environment. Additionally, since 1396 S.H. (2017), a new book entitled *'EnsanvaMohit-e Zist [Humans and the Environment]'* was incorporated into the syllabus, in whose seven lessons, environmental issues and the manner in which the environment is to be protected are discussed. In the book *OlumeEjtemaee [Social Sciences]* of the pre-university level, the issue of changes in the governance of the world, the phenomenon of colonialism and westernization and its impact on lifestyle, and the emergence of socio-cultural and identity crises are discussed. These concepts can be classified as the general skills for a healthy life, whose numbers are presented Table 4but is not included in the calculations related to the topic of the research.

Although there are some direct and indirect references to the crisis and related concepts in the coursebooks, a few thematic discussions about the issues can be seen in the teacher's guides, and the focus was mostly devoted to the covering of the purpose of the lesson and to offering suggestions about appropriate teaching methods for the lessons. Table 5 shows the features of the discussions related to crises and the manner in which they were introduced in the books in the teacher's guides. In the 12 analyzed guidebooks, 40 pages are devoted to the topics and discussions addressing the crisis, whether directly or indirectly. It should be noted, however, that there is no explicit mention of natural nor man-made crises in the books; instead, the issues and concepts related to crises have been included implicitly and indirectly.

Table 4. Number of Discussed Concepts in Coursebooks

Type of Crises/Issues	Number of Topics Related to Recovery (after the occurrence)	Number of the Prevention Discussions (before the occurrence)	Number of Pages of Discussed Concepts
Natural	15	25	46
Manmade	39	82	180
General	17	5	17
General Skills for Healthy Life (Individual and Social)	106	263	266

Table 5. The Way Crisis-Related Concepts Are Incorporated into Teacher's Guides

Type of Crisis/Issue	Number Pages of Discussed Concepts	Number of Prevention Topics (Before the Occurrence)	Number of Discussions Related to Recovery (After the Occurrence)
Natural	-	-	-
Manmade	-	-	-
General	40	18	25

Due to the fact that the main function and emphasis of teacher's guides are teaching methodology and teaching the content and that they pay little attention to the topics themselves, the analysis of the teacher's guides is discontinued at this point, and the researchers will shift the focus to the analysis of school coursebooks.

The second and third questions of the research were as follows:

- How much does the content of the selected coursebooks address the proper preparation of students before a crisis/incident?

- What information do the selected coursebooks provide students for the conditions that happen after the rising of a crisis/incident?

The amount of attention paid to the issue of the crisis in the primary and the secondary school coursebooks is reported in Table 6, according to the criteria approved by the experts and evaluators. Out of the 410 terms and concepts raised, 256 cases (62%) refer to crisis recognition and outcomes of crises; about 20% to the prevention issue and preventive measures; 6% to measures during the crisis and initial steps for coping with a crisis; 2% to supports and hygienic/medical interventions, including mental health care; 1.4% to personal and social rights of crisis-stricken people; and, finally, 2.9% of the focus had gone to the innovation category in the interventions. From the 11 components (categories) extracted according to expert opinion, content with a direct thematic relation was not observed for four of the components in the crisis-related topics. Nonetheless, some of these components are used in more general lessons and topics, such as *Life Skills.* The Mann-Whitney U test was used to compare the weights assigned by the experts and the weight extracted from the content analysis of the books. Accordingly, the extracted weights in both tables were ranked and compared. Table 7 shows the weight of the components and their rank and the comparison made by using the formula of Mann-Whitney U for the average samples.

$U1= 11*7+ (11(11+1)/2) = 77+66= 143$ $U2= 11*7+ (7(7+1)/2) = 77+28= 49$

According to the fact that the U reported in the table indicates the 95% level of confidence (p <0.05), equal to 17, which is less than the calculated U2, the assumption that the ratings are equal is thus rejected, and there is a significant difference between the two categories of the ranks. In addition to the test of rank difference, the result of the Chi-Square test (χ^2=45.06) also shows a significant difference between the scores of the assessors (the expected ones) and the scores observed in the coursebooks, which indicated the 95% of the confidence level (p<0.05).

The analysis of the numeric data also indicates that the focus of the coursebooks on crisis recognition and consequences of crises is more compared to other components. However, from the point of view of the experts, in the crisis category, paying attention to prevention issues and to initial coping measures, is more important. Therefore, the amount of attention devoted in the coursebooks to proper preparation for conditions occurring prior to the occurrence of crises (preventive measures) is low, and the attention paid to the conditions occurring either following incidents or during crises is even far less.

Table 6. The Amount of Attention Paid to the Crisis in Coursebooks Considering the Concepts and the Terms

Issue/ Books	A	B	C	D	E	F	G	H	I	J	K	The manner in Which Topics Were Addressed	
												Direct	Indirect
OlumeTajrobi [Empirical Sciences] (First Grade)	6	-	-	-	-	-	-	-	-	-	-		✓
Farsi (Literature) (Second Grade)	-	-	-	-	2	-	-	-	-	-	-		✓
Farsi (Third Grade)	3	4	-	-	5	-	-	-	-	-	-	✓	✓
MotaleatEjtemaee [Social Studies] (Third Grade)	-	22	2	-	-	-	-	-	-	-	-		✓
MotaleatEjtemaee [Social Studies] (Fourth Grade)	-	4	-	-	-	-	-	-	-	-	-		✓
OlumeEjtemaee [Empirical Sciences] (Fourth Grade)	-	4	1	-	2	-	-	-	-	-	-	✓	✓
MotaleatEjtemaee [Social Studies] (Fifth Grade)	-	-	1	-	3	-	-	-	-	-	-	✓	✓
MotaleatEjtemaee [Social Studies] (Sixth Grade)	2	-	-	-	-	-	-	-	-	-	-	✓	✓
MotaleatEjtemaee [Social Studies] (Seventh Grade)	7	6	-	-	2	-	-	6	-	-	-	✓	✓
TafakorvaSabk-e Zendegi [Thinking and the Life Style] (Eighth Grade)	-	7	1	-	-	-	-	-	6	-	-	✓	✓
MotaleatEjtemaee [Social Studies] (Eighth Grade)	4	-	-	-	4	-	-	-	-	-	-	✓	-
AmadegiDefaee [Defense Training] (Ninth Grade)	36	19	3	-	-	-	-	-	1	-	-	✓	-
MotaleatEjtemaee [Social Studies] (Ninth Grade)	13	-	-	-	-	-	-	-	-	-	-	✓	-
AmadegiDefaee [Defense Training] (Tenth Grade)	28	13	17	-	-	-	-	-	-	-	-	✓	-
JoghrafiayeOstan-e Tehran [The Geography of Tehran Prov.] (Tenth Grade)	24	-	-	-	-	-	-	-	-	-	-	✓	✓
JoghrafiayeOstan-e Khuzestan [The Geography of Khuzestan Prov.] (Tenth Grade)	15	-	-	-	-	-	-	-	-	-	-	✓	-
JoghrafiayeOstan-e Khorasan Razavi [The Geography of Khorasan Razavi Prov.] (Tenth Grade)	14	-	-	-	-	-	-	-	-	-	-	✓	-
Jame'eShenasi 1 [Sociology 1] (Tenth Grade)	9	-	-	-	-	-	-	-	-	-	-	✓	-
Ravanshenasi [Psychology] (Eleventh Grade)	13	-	-	-	-	-	10	-	-	-	-	✓	✓
ZaminShenasi [Geology] (Eleventh Grade)	1	-	-	-	-	-	-	-	-	-	-	✓	-
Jame'eShenasi 2 [Sociology 2] (Eleventh Grade)	22	-	-	-	-	-	-	-	-	-	-	✓	✓
EnsanvaMohitZist [Humans and the Environment] (Eleventh Grade)	37	2	-	-	2	-	-	-	5	-	-	✓	-
OlumeEjtemaee [Social Sciences] (Pre-University Level)	20	-	-	-	-	-	-	-	-	-	-	✓	-
OlumeZamin [Earth Sciences] (Pre-University Level)	2	-	-	-	-	-	-	-	-	-	-	✓	-
Sum	256	81	25	-	20	-	10	6	12	-	-		
Ratio (Weight)	62	19.7	6	0	4.8	0	2.4	1.4	2.9	0	0		

Discussion and Conclusion

Teaching the right lifestyle, tolerance for calamities, personal and social improvement and promotion of a social move towards cooperation, and, finally, empathy and cooperation among community members are among the goals and missions of the educational system both globally and locally (IRI). Accordingly, educational systems should adopt strategies, methods, and appropriate tools for the above purpose and be able to communicate them to students during the educational course. Gaining advantage of the potential and capabilities of children and adolescents as regards how to face and overcome crises, has been emphasized by international organizations such as the United Nations (Iranian National Commission for UNESCO, 1394/2015) and UNICEF (2013).

Today, the number of crises, whether natural or man-made, is increasing for various reasons, such as the lack of natural resources, the greediness of countries and humans, and climate changes. Even beyond this, changes brought about by humans to the natural environment, such as the gradual destruction of forests, the lack of a wise plan for launching construction projects, and the overuse of underground water reservoirs, have led to an increase in the number and extent of environmental crises such as floods, droughts, and conflagration, a fact to which community members, including common people, do not pay much attention due to ignorance or insufficient information. The above conditions and difficulties, which have been affecting the today's life of the community and will influence it in the future, require that the educational system create and develop, among children and adolescents, a concern and preparedness for both decreasing and addressing factors leading to crises and dealing with post-crisis conditions, and, in

sum, design and pave the ground for crisis management. A starting point for the above-mentioned preparedness is the educational environment that surrounds children and adolescents.

If the budget allocated for crisis management (%5 of the entire budget of the country) is assumed to be the basis of the comparison, it is expected that at least the same amount of the curriculum and content of coursebooks be devoted to the same topic, including crisis situations. In the present study, the content of the selected coursebooks was analyzed as a representative of the approved curriculum. The initial study of the related documents and pieces of evidence and of the viewpoints of the selected experts indicates that it is necessary to incorporate 11 factors affecting crisis situations into the educational curriculum of the Iranian educational system. Nevertheless, the analysis of the content of the selected coursebooks in different levels demonstrates that the major focus of the coursebooks (above 60%) is devoted to the introduction of the typology and consequences of crises. The next rank (a lower percent) goes to preventative measures in the face of crises and incidents, and, finally, less than 20% is devoted to other factors. Among the coursebooks selected for the study, it was the books entitled *AmadegiDefaee [Defense Training]* which had addressed issues related to crises. Next comes *EnsanvaMohitzist [Human and the Environment]*, which was introduced in 1396SH to the senior secondary level coursebooks to focus on crisis-related issues as well as crisis management. While in the Higher-Level Documents of the Iranian educational system, including the Fundamental Reformation Document for Education (FRDE) and the Document for the National Curriculum, the topic of life-

threatening crises has been left almost neglected and thereby untouched; introducing such a topic and incorporating the required coursebook into the curriculum can open a new horizon in which more attention is devoted to the issue of crises, followed by teaching crisis management techniques.

As in other coursebooks (such as *UlumeTajrobi [Experimental Sciences] for the 9th grade*), despite the fact that the title of the book implies a close relationship with the topic of crisis, no attention has been devoted to the issue, either. Additionally, despite the fact that a considerable portion of the present crises is either cultural or social, the related book, *TahlileFarhangi* [*Analytical Study of Culture*] for the senior secondary level had not addressed this important issue. In all the coursebooks, the earthquake is the topic attracting the most amount of attention compared to other crises.

Executing earthquake maneuvers on certain days of the school year, with the collaboration of the Iranian Red Crescent Society and other emergency organizations and the police is one of the programmers organized and launched in Iranian schools as a matter of routine. The Iranian Department for Firefighting and Safety Measures has recently begun to address this issue by carrying out firefighting maneuvers. However, bringing the issue of crises to the public attention through taking advantage of a variety of methods and exploring every avenue towards this goal in the years of formal schooling should become one of the primary missions of the educational system of any country.

The findings of this research suggest that the actual and potential risks of crises make it essential that the system involving curriculum design draw on the global experience, consider local needs, and take important measures in line with the protection of the society and its on-going progress by bringing to the public attention the issue of crises as regards the educational system. Exploiting the untapped potential of coursebooks as concerns the guidance of the growing generation of children and adolescents, organizing teams consisting of school teachers aimed at recognizing studying local crises, reviewing and revising the content of coursebooks to adapt them to real needs, and finally providing students with the required education are some of the most important missions definable for the Iranian educational system. Children and adolescents have great potential as active participants in the topic of crisis management, and this enormous potential can be realized by offering the required training and education. The school curriculum and the coursebooks incorporated into it provide an appropriate ground for the achievement of the above-mentioned goal. Devoting a separate course to the topic of crisis management and improving skills required for preparedness in the face of crises and for crisis management (following the occurrence of crises and incidents), in addition to exploiting the unfulfilled potential of the non-compulsory courses included in the formal curriculum can fulfil the increasing needs of the society to some extent. Conducting further research, both theoretical and applied, can provide considerable help in the educational system to address real needs more comprehensively.

Postscript:
This article has been extracted from the researcher's PhD thesis

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