

## A Comparative Study of Status of Health Literacy in the Curriculum of Finland and Iran

### ABSTRACT

**Background and Objective:** Health Literacy is one of the most important determinants of health in the world that the educational system plays an important role in promoting it among students. The purpose of this study was to investigate the comparative status of health literacy in the educational system of Finland and Iran [curriculum, course books and, documents].

**Materials and Methods:** In the present study, the content analysis of documents was used. The data were collected by examining the documents related to the educational system of these two countries. To achieve the comparative purpose of the study, Beredy's proposed was used. The collected data were first summarized in tables and then analyzed.

**Results:** The results showed that in Finnish schools, health education is offered as a separate curriculum and the subject of health literacy is considered as a learning object. While in Iran, health literacy has not been independently addressed as a separate curriculum and has not been addressed in textbooks, although the overall topic of health and physical education has been emphasized in the documents of curricula.

**Conclusion:** The results showed that despite the development of curriculum documentation and implementation of the health- promoting schools project in Iran, no curriculum specifically teaches health education and especially health literacy to students in programs and course books, although the health and physical education has been heavily emphasized in the curriculum document. While health literacy in Finnish schools and curricula has been emphasized and new reviews in the content of lessons are taking place every year.

**Paper Type:** Research Article

**Keywords:** Health literacy, Curriculum, Health-promoting schools, Finland, Iran.

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## Introduction

Health and wellbeing are one of the essential needs of humans, which have always been of attention to policy-makers in different areas including educational sciences. The general belief of these policy-makers to fulfill the ultimate goal of the education system is careful attention to the health dimension. "One of the major areas of education is considered biology and physique, which is directly associated with health promotion" (1).

Meanwhile, "health literacy" is of interest as an important concept and approach which concurrently takes care of health and education in line with each other, and considers them as interdependent. World health organization defines health literacy as social and cognitive skills which determine the person's motivation and ability to acquire, understand, and use health information for health promotion (2). In another definition by American Medical Institute (2004), the capacity of processing and understanding essential information to adopt proper decisions regarding health has been emphasized. This institute divides health literacy into four dimensions: cultural and conceptual knowledge, reading and writing skills, verbal-auditory skills, and computational skills, each of which is developable through education in some way. In this regard, Nutbeam (2008) identified functional literacy, interactive literacy, and critical literacy as three different types of health literacy, each of which observes different levels of mechanisms affecting health. Indeed, each of these three types cover the effective function of the person in daily activities, wide cognitive skills for active participation in the daily life, and eventually extensive cognitive skills for critical analysis of information and effective control over life conditions (3).

Recently, Abel (2003) considered health literacy

as encompassing human social participation in health issues, which provides sufficient knowledge for health improvement. According to him, folk knowledge which is acquired through culture of the family, friends, and mass media helps in better understanding of health issues. Thus, health literacy not only supports health but also means increased opportunities for healthy biological conditions (4).

As the above points suggested, the definitions of health have emphasized the ability of individuals in interpreting and applying health information in their decisions. Meanwhile, the American health and human service department has recently paid attention to the role of society in presenting comprehensive and credible information (5). Accordingly, as a general statement, it can be argued that personal choices (responsibilities) in acquiring the necessary health literacy are an outcome of wider structural factors across different levels, affecting the quality of the life of the person. One of these influential factors at a median level is educational opportunities. Note that the quality and level of development of educational opportunities are very different across various counties, which can significantly affect the health literacy of individuals. In this regard, in the ninth global conference of health improvement (2016) called "health literacy and sustainable development", the role of adequate health has been emphasized in approving health behaviors and health-oriented lifestyle, and thus reduction of poverty, hunger, more suitable education, economic growth, innovation in industries, reduction of various inequalities, and creation of peace and equity. According to the results of this conference, increase in the health literacy among individuals leads to their active engagement in improving their own health. Meanwhile, various institutions and

governments will also play a key role in raising awareness of deprived and marginalized areas, which will culminate in diminished inequality across different segments of the society including health (6). On the other hand, according to UNESCO research, the educational system, for fulfilling its objectives in different counties, faces various problems including malnutrition, obesity, hunger, violence, unintended pregnancy, and AIDS, whose major cause is absence of or poor health literacy among different classes of the society especially teenagers (7). Dehghankar et al. (2019) investigated 372 students in female high-schools of Qazvin city, and observed low health literacy of more than half of the students; the main variables affecting this issue included the educational grade and interest in health issues (8). Jafari and Peyman (2018) also examined the studies performed on models/theories of health education and health promotion in health literacy research in a systematic way among different groups including students. They concluded that the self-efficacy construct had the most significant role in health literacy. Here, educational system as an influential institution can play a prominent role in increasing this variable and thus improving the students' health (9). In another study, Sarpoushi et al. (2018) systemically reviewed the health literacy studies in Iran and concluded that health literacy has been low among different groups, which itself requires the attention of health authorities and different policy-makers in this regard (10). Also, Saeidi, Jalili, Tavakoli and Gahnbari (2017) found limited health literacy among high-school students. According to them, health literacy can have a significant role in raising awareness about health and self-care behaviors among teenagers (11). Jensen, Bundeh, and Christinsen (2017) examined the effect of literacy-oriented educational program in Denmark schools called "IMO", which related the health

literacy to physical exercise. According to them, school trainers have a key role in incorporating health literacy development into the curricula of schools and their better learning (12). Sukis, Trinkoin, and Tilindin (2019) examined mental health literacy among students. According to them, improvement and promotion of health literacy in the early years of life will have a key role in development of personality and health during adulthood, which requires attention of educational institutes to this important issue (13). In another study, Kilgor, Matthews, Christin and Shireh (2015) qualitatively explored the health literacy in the curricula of three high-schools in England. According to them, in spite of proper knowledge of students and educational trainers about health literacy, this issue was missing in the curricula especially for reducing health inequalities. According to them, the future curricula can incorporate educational curricula of healthy schools (14).

According to the above evidence, the necessity of this research becomes evident when we understand that healthy students are better learners, and health-associated issues prevent effective learning in them. In other words, all attempts for making education effective will be useful only when the learners' health is guaranteed; otherwise, the outcome is loss of various financial and human resources. On the other hand, the most important environment a person exists in and play a key role in development of healthy behavioral patterns in the person is the schools and educational system. By providing various opportunities, development of social norms models, and establishing barriers to personal choice and its guidance towards proper routes, this social environment will have a considerable impact on promoting the health literacy of individuals.

In this regard and to resolve such problems,

policy-makers in different counties have presented various solutions for health promotion across schools of different counties. One example is implementation of the project “health-promoting schools” in Iran (15). The main axis of this project revolves around the importance of all schools’ aspects on the students’ health (16). In case of adopting a compressive and integrated approach by the authorities [unlike the only information-oriented approach at schools], can play a key role in improving the health and wellbeing of students, improve their learning potentials, develop equity and reduce inequality among different groups, and relate health and educational issues. All these require extensive and interactive communication between the school authorities, teachers, parents, and local community (17). Accordingly, as noted by Duncan (2011), the experience of different counties has suggested that the curricula developed for health promotion which have a prescriptive approach have not been successful, and it is better that the curricula are planned based on an approach which guarantees active participation and involvement of learners. ... In other words, according to Tomlinson et al. (2008) as well as Sidebotham, Walters, Chipperfield & Gamble (2017), better learning is contingent upon congruence between the educational curricula and the learners’ needs (18). Accordingly, in the present research, we intend to compare the educational system of Iran and Finland regarding fulfillment of health literacy plans and the different solutions presented for this purpose. This comparison, in addition to unveiling the theoretical and practical gaps that exist between these two counties, can provide effective practical and managerial solutions for the educational body of the country.

Note that social research regarding the structure of medical problems in Iran (generally) is historically very young, and very simplistic and

weak regarding content. Accordingly, in Iran, given the current socioeconomic problems in the health system, such research in this regard can be useful and effective. The results of studies and research about the status quo can help planners and executors both theoretically and practically in better and more complete use of medical-health facilities (19). Accordingly, in this research, we have attempted to compare the status of health literacy in the curricula of Iran and Finland.

### Material and Method

Comparative study is a research method whose main idea is analyzing and understand similarities and differences between educational systems, institutions, and phenomena. This understanding and its interpretation should be done in the social, cultural, political, and economic context of educational events, causing development of an approach for solving educational problems and demonstrating effective areas of educational progress or decline (20). Accordingly, in the present research, documentary content analysis was used based on the comparative approach of the research by investigating 22 papers done in 2000-2019, through the method proposed by George Bordi. The statistical population of this research consisted of the educational curricula of Iran and Finland, chosen based on the criteria of availability of information and comparability of the two countries in terms of curricula (13-14). George Bordi has proposed four stages for comparative method: description, interpretation, juxtaposition, and comparison (20).

In this regard, first by referring to the documents related to countries such as websites of educational systems (schools) and reliable research papers, the information related to Finland and Iran was collected and described, where the notes required for

subsequent stages were taken (description). In the next stage, the described information was interpreted, by analyzing which the accuracy and suitability of information can be ensured (interpretation). In the juxtaposition stage, the information was classified and organized. In this research, attempts have been made to classify the obtained information as tables with a specific framework designed based on the research questions (juxtaposition). Eventually, the classified information was analyzed based on the research questions and compared with each other (comparison). To achieve the information required in this research, an extensive search was done in Persian and English papers until 2019. The electronic search was done using Persian and English databases including SID, Magiran, Noormags, Google Scholar, Sage, Springer, and Science Direct, where all relevant papers were included. Also, in this study, the website of ministry of education of the two counties was also used. Next, the data of interest were collected, classified, and presented as tables for each element of the curricula and compared with each other.

## Results

This section deals with the status of health literacy in the schools and curricula of Iran and Finland. At the end, attempts are made to present the elements of the curricula as separate tables.

“Health literacy” has found a different status in the curricula planning system of different countries as an important issue according to the policy-making of governments. In this regard, world health organization has emphasized the necessity of role of various governmental and non-governmental institutions [e.g. government, civil society, social media, social leaders, as well as academic and educational institutions] in promoting the health literacy and investment in

it. In this regard, attempts are made to examine and compare the role of health literacy in Iran and Finland schools across various dimensions including incorporating health literacy in curricula, various health literacy projects in schools, etc. Note that this investigation is performed across different schools [in general; not with a specific focus on one grade].

### Health literacy in Finland schools

In Finland schools, “health education” is in place as a separate curriculum in this country since 2004, which centralizes on “health literacy” as an important learning objective (21-22). The aim of the mentioned lesson is improving the abilities of students considering the health, welfare, security, and development of cognitive, social, functional, and ethical competence along with their abilities in improving emotions and feelings. This curriculum is presented for grades 7-9 (13-16 years of age) alongside the Finland national curricula, and also as an independent curriculum at high-schools and above. Also, in Finland schools, the teachers need to have a suitable academic degree for educating this curriculum; according to statistics in 2009, around 60% of high-schools in Finland have teachers with a relevant academic degree (21).

In a study by Hirvonen, Nygard, Palmgren-Neuvonen, Huhta & Huotari (2019), with an emphasis on “information health literacy” as a separate axis of health literacy, and differentiation of its different dimensions including access, assessment, and use of information, they compared the mentioned dimensions in the national curricula and educational books of Finland in 2004 and 2014. Based on the results, in 2014 and thereafter [in the national curricula and educational books], a heavy emphasis is laid on supporting acquisition, assessment, and use of personal and social information, methods for searching health

services, benefitting from various written and online resources by teachers and students, acquisition, assessment, and use of health- and disease-associated information. All these result in development of different capabilities among students including thinking and learning about education, cultural competence, interaction and self-expression, self-care and management of daily life, multiple literacies, information and communication skills, participation, and creation of a sustainable future. In this regard, the educational books of this country in different editions, while taking care of similar issues, have also emphasized new dimensions. They include online health (Edition 16) and health literacy and health in media (Edition 17). Other important projects and plans in this regard are implementation of “health-promoting schools” and “comprehensive health school” in Finland; a global program which was initiated in 2001 by WHO and other international beneficiaries. In this regard, annually a specialized study called “study on health-promoting schools” is done by the national health and welfare institute to measure the welfare, health, and performance of Finland schools. The aim of these studies is improving the planning and assessment of health improvement activities in schools at national and regional levels. Eventually, it should be noted that a special attention is paid to ensuring sustainable life development for future generations in the Finland curricula; such that many educational policy-makers take Finland as a special role model for development and health-oriented curricula in other countries (23).

### Health literacy in Iranian schools

The ministry education of Islamic Republic of Iran, in line with fulfilling the 20-year perspective document, after composing the document for transformation of education (2011), for all-round elevation of the educational system, and for

resolving the current problems, since 2007, for the first time in the history of education following Islamic revolution, initiated the development of national curricula of Islamic Republic of Iran (2012). One of the areas of interest in the mentioned document which is highly relevant to the status of health literacy in curricula is the health and physical education.

The area of health and physical education seeks to establish complete physical and psychological health of students as a divine trust and by applying proper methods for doing physical activities, promoting physical and kinesthetic abilities, interpreting healthy recreational methods and promoting health and principles of healthy living, and preventing disease and disorder, or limb disabilities and empowerment of individuals in mastering their behavior and maintaining health. Acquisition of essential qualifications of this area enables students to know their physical and psychological capacities, trust them, and strive to develop them. These teachings help students take responsibility for their health and believe in their role in ensuring physical and psychological health as well as personal and social happiness especially the family health.

This area of education and learning has two main subareas: “health” and “physical education, exercise, and healthy entertainment”, which include the following:

- Kinesthetic skills and physical preparation;
- Sports games and fields;
- Healthy entertainment;
- Principles of healthy and balanced diet;
- Safety and preventing social or collective damages in different dimensions or conditions;
- Biological skills as well as personal and public health;
- The health system for physical and psychological health with an emphasis on the personal, family, and public health;

- Adolescence health (24)

In organizing the content of this area in educational grades, physical, intellectual, social, psychological, and spiritual dimensions should be integrated (1).

Also, regarding the emphasis by international organizations on implementing the health-promoting schools project and the attempt of different counties in this regard, in Iran since 2010, implementation of health-promoting schools has become initiated. This plan is “a system for health promotion, which through

the active participation of parents, trainers, students, and with an empowerment approach and training peers, will lead to enhanced capacity of students regarding self-care, self-care culture, people empowerment for healthy living, healthy working, and quality education” (15).

Comparison of the health literacy status in the educational systems of Iran and Finland

Based on the explanations given above, the health literacy status of Iran and Finland can be compared in the following table.

**Table 1. Comparison of the health literacy in the curricula of Iran and Finland**

	Finland	Iran
Curriculum	The plan “health education” as a curriculum	The plan “physical education and health” in the curriculum document, which involves two main subareas: “health” and “physical education, exercise, and health entertainment”
	Health education as an important learning objective	Not propounding the health literacy as a separate concept in the curriculum document
	Central attention to sustainable development in the curricula	No centrality of sustainable development in the curricula
Educational books	Presenting new areas in different editions of educational books including health literacy	No centrality of health literacy in curricula books and limited to professional books
	Use of various online sources and benefitting from ICT facilities to raise awareness of students for their health improvement.	Existence of a wide gap in the up-to-date facilities and abilities in different regions and lack of familiarity of specialists with their potentials to enhance the health of students
Teachers	Use of experiences teachers with a relevant academic degree for presenting the specialized course of health education	Absence of a specialized course with this name; nevertheless, in recent years, extensive attempts have been made for the National Organization of Educational Testing to employ teachers with sufficient knowledge

## Discussion and Conclusion

The present study was performed with the aim comparing the health literacy status in the curricula of Iran and Finland. Based on the obtained results, according to documentary content analysis and George Bordi comparative approach, it can be stated that although in both counties some attempts have been made to

implement health-oriented curricula in schools, in Finland, implementation of the curricula and the content of educational books more deal with educating health and improving health literacy and its positive resulting consequences among students. On the other hand, in Iran, these attempts have been mostly practiced as

physical education and health programs [mostly nutritional and exercise health]. By benefitting from the achievements and experiences of successful counties in this regard, a comparative and more comprehensive approach should be adopted in this regard.

Another notable point is the implementation of health-promoting schools projects and comprehensive health schools in the two counties. Although the mentioned program is under practice in both counties, with strengths and weaknesses, based on the findings obtained from the review of literature, it can be inferred that in Iran, this plan is problematic in the area of practice; even in the document for curricula, as one of the most important top agenda documents in the area of education, this has been limited to physical education programs in schools. Indeed, it has overlooked the all-round and comprehensive attention to the three dimensions of health literacy.

Nevertheless, this research has been based on a comparative work, and has only compared the written documents of Iran and Finland. Thus, it is suggested that in future, researchers while paying attention to various approaches and methods, do the investigation in more counties especially those that have a significant difference in terms of educational system and curricula, so that a more comprehensive approach can be adopted in this regard.

Finally, based on the findings of this research, some practical suggestions can be offered for the necessity of adopting a health literacy-oriented curriculum in schools:

Periodic comparative investigation of the curricular elements in developed and developing counties and the necessity of their assessment and revision.

Composing a curricula document covering the objectives, content, and principles of curricula

with regards to the importance of health literacy in educational books.

Holding educational courses both in-person and online for students and trainers for enhancing the health literacy of individuals.

Diversifying comprehensive health schools and adopting an all-round and integrated approach about them by educational policy-makers.

Preventing conversion of the curricular content to a content without substance or without awareness raising programs regarding health and promotion of health literacy among students.

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