

INVESTIGATING THE RELATIONSHIP BETWEEN MEDIA LITERACY AND HEALTH LITERACY OF CITIZENS OF BANDAR ABBAS

INVESTIGANDO A RELAÇÃO ENTRE LITERACIA EM MÍDIA E LITERACIA EM SAÚDE DE CIDADÃOS DA BANDAR ABBAS

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Abstract: Health literacy is a set of cognitive and social skills that determine individuals' motivation and ability to acquire and access information. Considering the importance of social participation discussion, the present study seeks to answer the central question of whether there are different dimensions of media literacy and social literacy using survey method, survey technique, questionnaire tool and SPSS, and Smart PLS software. Also, we question: is there a connection between media literacy and health literacy for Bandar Abbas? The study's statistical population is Bandar Abbas citizens from 18 years old and above 384 of them were selected as the sample size. The results indicate that between media literacy (0.36) and its dimensions, namely information evaluation (0.42), information composition (0.32), purposeful use (0.37), information exchange (0.28), and how to use media (0.26), there is a positive, direct and significant relationship with citizen health literacy.

Keywords: Media literacy; Health; Health literacy; Bandar Abbas city.

Resumo: A alfabetização em saúde é um conjunto de habilidades cognitivas e sociais que determinam a motivação e a capacidade dos indivíduos de adquirir e acessar informações. Considerando a importância da discussão da participação social, o presente estudo busca responder à questão central de saber se existem diferentes dimensões da alfabetização midiática e social por meio do método de pesquisa, técnica de pesquisa, ferramenta de questionário e SPSS, e software Smart PLS. Além disso, questionamos: há uma conexão entre a alfabetização midiática e a alfabetização em saúde para Bandar Abbas ?. A população estatística do estudo é composta por cidadãos de Bandar Abbas a partir de 18 anos e acima de 384 deles foram selecionados como tamanho da amostra. Os resultados indicam que entre a alfabetização midiática (0,36) e suas dimensões, ou seja, avaliação da informação (0,42), composição da informação (0,32), uso proposital (0,37), troca de informação (0,28) e como usar a mídia (0,26), existe uma relação positiva, direta e significativa com a alfabetização do cidadão em saúde.

Palavras-chave: Alfabetização midiática; Saúde; Alfabetização em saúde; Cidade de Bandar Abbas.

Introduction

When looking for health information, people face many challenges, such as the increasing prevalence and occurrence of chronic diseases, the complexity of the health system, the need to attend care, and the increasing availability of available information. (Tehrani Bani Hashemi et al., 2007). People should be able to choose new responsibilities in information search, understanding responsibilities, measuring and monitoring health, making decisions about insurance and choosing the type of care. Health literacy is the capacity a person has to acquire, interpret, and understand basic information and health services essential to making the right decisions (Sihota et al., 2014).

Health literacy involves the ability to understand the prescription of prescribed medications, medical education brochures, and consent forms. It also includes the capacity to benefit from a complex medical system, reading, listening and analysis skills, decision making, and the knowledge to apply these skills in health situations that are not necessarily related to years of study or general reading ability (Kickbusch, 2014).

Health literacy is a set of skills to read, listen, analyze, make decisions, and be able to use these skills in health situations that are not necessarily related to years of study or general reading ability. Health literacy is a set of cognitive and social skills that determine individuals' motivation and ability to obtain and access information, understand and use it to promote and maintain good health. Health literacy is a range of skills and resources related to the ability to process health-related information and the major concerns of health professionals and officials.

High health literacy regulates people's health and nutritional behaviors and will reduce harmful behaviors/habits. On the other hand, taking preventive and self-care behaviors is also directly related to health literacy. If health literacy is promoted in the community, the number of visits to the doctor will decrease, and the patient's medical expenses and health system will be reduced. But in scientific studies, health literacy is unfortunately not high among Iranians, especially middle-aged and elderly, and health literacy in these two groups is lower than the tradition of many developing countries (Salehi Nik et al., 2017).

Confronting complex health systems is difficult for humans, even with sufficient literacy skills; but people with low health literacy experience more problems in this area. Insufficient health literacy is claimed to be associated with an individual report of poor health status, poor drug use, failure to follow your doctor's instructions, poor control of blood sugar and blood pressure, increased prevalence of individual reports of problems due to poor control, less health knowledge, less participation in medical decisions, and poor communication between physician and patient. People with low health literacy are also less aware of their health. They do not receive adequate preventive services. It is not desirable to control chronic diseases in them. They have poorer physical and mental health performance and are more likely to use emergency units and hospital services (Chew et al., 2014).

But there are many reasons why several of the adverse health-related outcomes are therefore insufficient. According to a study by the American Center for Health Care Strategies, people with low health literacy are less likely to understand written and spoken information provided by health professionals and follow instructions. Therefore, they have a poorer health status (Raisi et al., 2011).

Today, the widespread use of new media such as the Internet, satellite, and virtual social networks has created a new world that includes a collection that is interconnected, intertwined and multifaceted (Azizi and Heidarkhani, 2012), and they affect many aspects of human life, including health and wellness.

As carriers and transmitters of the message, the mass media can be effective in building the general culture of beliefs and public opinion. Regardless of ideological and cultural geographical boundaries, they have been able to be present in all geographical locations (Sarokhani, 2006). Accordingly, the issue of health and health literacy is one of the most fundamental issues in the development of societies today, especially in developing societies, which are strongly influenced by the mass media, and, in this regard, special attention should be paid to media literacy. Media literacy should be implemented in the country as a strategy in the country to

benefit effectively and effectively from the media and reduce its destructive effects and support a scientific consensus. (khosh zaban et al., 2019). Media literacy is a subject that considers the power of the audience's understanding of how the media works and the means of making sense of it, and seeks to turn this analysis into a habit and task for the audience (Afshani et al., 2018). Media literacy provides a way for media users to seek the truth amidst the confusion of events and information and to achieve their goal of achieving the complete understanding possible (Nematifar et al., 2018).

Given that the increasing entry of various media into people's lives has not deprived the most private and possibly the safest living space of their reach (Tabrizi, 2019), media literacy in the field of health literacy should become a health discourse in society. In other words, health information can be the source of the effect when health literacy is institutionalized in society, and this is possible through the media. Therefore, according to the given explanations, the present study seeks to answer the main question of whether there is a relationship between media literacy and health literacy of the citizens of the city of Bandar Abbas.

Despite the great importance of health literacy, this issue has been less addressed in Iran. Hence, such a study has not been conducted in the Bandar Abbas region addressing health literacy, general health status, and preventive behaviors to help planners and health officials, and policymakers. so it's essential to pay attention to that.

Research background

Internal research

Mohammadi et al. (2017) conducted a study entitled "Health literacy and related factors in students of Hamadan University of Medical Sciences". This cross-sectional study was performed on 386 students studying in different Hamadan University of Medical Sciences fields who were selected by a multi-stage sampling method. The findings showed that students got the most information about their health literacy via the Internet. Based on the results, there was a significant relationship between the variables of age, gender, marriage, school of study, and the type of information retrieval of students with the dimensions of health literacy.

Healing Moghaddam and Rastegari (2016) conducted a study entitled "Application of Emerging Technologies and Social Media in the Health System". In this study, the role of technology in health information is emphasized and provides theoretical methods for using technology. The study results showed that the use of communication technologies and social media has improved the effectiveness of health system communications and facilitated contact between the patient and health service providers and will bring positive results for the health system.

Tehrani (2016) carried out a study entitled "Media literacy health". According to the study, many people agree that the media is the biggest educator in today's society. In today's society, a person spends most of his/her time sleeping after seeing the media. Therefore, the content of these media should be considered in various fields, especially health.

Bidgoli et al. (2016) conducted a study entitled "Study of the position of the Internet in health information behavior: the study of young Internet users in Shiraz." In this survey study, the statistical population of youth was Internet users in Shiraz, and a sample of 400 people was selected by a multi-stage cluster random sampling method. Based on the results of gender, the level of education, background, and skill of using the Internet, the authors pointed out a significant incidence with the search for health information through the Internet. Respondents' overall attitudes toward health information retrieved via the Internet were also positive.

Masoumizadeh Dezfuli (2016) conducted a study entitled "The effect of media on young people's tendency to a new lifestyle related to health." The aim of this study is to investigate the effect of media on young people's lifestyle trends related to health. This study's statistical population was people who participated in cultural, artistic and sports programs of Tehran Municipality. According to Morgan's table, 322 people were considered as examples. The research findings show that visual media play an effective and significant role in promoting a new

lifestyle related to health among young people. These findings suggest the need for targeted planning to expand the new lifestyle related to health during media programs.

External research

Lee et al. (2017) conducted a study entitled "Study of the relationship between health literacy and health status and the use of health services in Taiwanese adults". Thirty percent of those surveyed had poor health literacy, and low health literacy was significantly associated with multiple illnesses and poor access to health services. By analyzing sociological variables, they showed that social capital with indicators of trust, support, solidarity, and participation could affect people's health literacy.

Aktia & Gurolb (2016), in their study on "Determining the relationship between media literacy and students' social skills" showed no significant relationship between the level of media literacy and social skills.

Hoffman (2009), in a study entitled "Media Literacy Study" observed 300 students who watched an average of 4 to 6 hours a day of television. They don't read a lot of newspapers, and the amount of reading in their magazines is mainly for magazines whose target market was young audiences. His research found that students were unaware of the factors that shaped the programs they watched, as well as the factors that shaped news reports.

Nutbeam (2000), in his research, defines three specific levels of health literacy:

Basic or functional health literacy: Basic reading and writing skills that require effective performance in a health field. Communication or interactive health literacy: Advanced literacy and social skills that enable a person to participate actively in health care, extract information and derive meaning from various forms of communication, and use the information to change situations. Critical health literacy: The ability to critically analyze and use the information to participate in actions that overcome structural barriers to health.

Health literacy theories

Becker and Mayman completed this model to study people's behavior in response to disease and diet.

The hypothesis of pattern designers was that the knowledge and awareness of people's health are affected by these factors:

- 1- Their fear of the subject (which was called the perceived threat)
- 2- Reducing the desired fear by performing the target behavior
- 3- Lack of mental health that is on the way to behavior (net benefits)

This model is one of the most useful models that health educators use to explain and predict health behaviors based on individual perception and belief patterns (Rahimi Hassana-bad and Arghavan, 2018: 154).

The structures of the health belief model include:

1- Perceived Sensitivity: A person's belief in the chances of having a condition that can be considered a person's mental perception of danger. As a result of this belief, the person considers himself/herself in danger.

2- Understood intensity: A person's opinion about how serious the situation is for him/her. It can be considered a person's mental understanding of the severity of the risk. As a result of this belief, one understands the seriousness of the danger.

3- Together, the two structures are called perceived sensitivity and severity.

4- Perceived barriers: The individual's belief in tangible and intangible costs (such as psychological barriers) is the recommended behavior. As a result of this belief, a person understands what obstacles he/she will face in order to perform the target behavior (Rasouli and Sarai, 2018: 55).

5- Perceived benefits: The individual's opinion about the effect of the recommended behavior to reduce the risk or severity of the effect. This belief in a person makes him/her believe in the benefits of doing the right thing.

6- Guidelines for action: Some events that can be internal (within the individual) or external (caused by the environment outside the individual) and force the person to perform the target behavior or create readiness for the behavior in him/her. Observing the symptoms associated with a disease in the body or following your doctor or health care provider's advice to perform a healthy behavior or avoid a risky behavior are guidelines for action.

7- Self-efficacy: The assurance that a person has the ability to perform a behavior successfully. It is the result of a person's belief in his or her ability to perform that particular behavior. This structure refers to a person's inner state, such as the talent or ability to perform a desired task or behavior.

8- Background variables: In addition to the above structures, there are demographic, psychological, social, and structural variables that may affect a person's literacy and indirectly his or her behavior from health literacy. Age, gender, income level, education, education is seen, place of residence, community culture, etc., indirectly affect other model structures (Rahimi Hassanabad and Arghavan, 2018: 154).

Kickbusch believes that health literacy is the ability of individuals to acquire, analyze, and understand the basic health information and services they need to be able to participate in health issues and make the right decisions. However, it should be noted that health literacy is a concept beyond a person's individual abilities and affects the quality of life of individuals and affects them.

Health literacy also relates to the abilities, tastes, and expectations of health information providers and caregivers such as physicians, nurses, the media, and many others. From a more general point of view, the necessary abilities to acquire health literacy can be divided into three groups in the following order: the ability to read consent forms, labels, and attachments related to medications and other written information related to health and wellness; ability to understand written and oral information provided by physicians, nurses, pharmacists and insurers; and the ability to act on guidelines related to pharmaceutical programs and medical care (Kickbusch, 2001: 77).

In their theory, Sudore & Schillinger introduced the best strategies as health literacy strategies to benefit all patients, especially patients with insufficient health literacy in the educational process. According to these thinkers, health literacy strategies in general are: a) use simple and understandable language; b) limit the information provided each time patients visit and repeat them; c) using frequent feedback techniques; d) using images and encouraging patients to ask questions; and ultimately e) using understandable and straightforward media (Sudore & Schillinger, 2009: 20).

In general, they believe that if health professionals are familiar with the concept and strategies of health literacy, they will present their statements in a way that educates patients. Also, they use participatory methods that help clients better understand the information they receive and gain more ability to act on expert advice. Because health literacy is a multifaceted issue that affects almost every aspect of health care delivery, Therefore, all those who are in some way connected with patients, their families and other people in clinical environments in writing or orally should have the necessary skills and abilities regarding the principles of health literacy (Sudore & Schillinger, 2009: 20).

Media literacy theories

For Hobbs, media literacy is the ability to evaluate media messages that operate on two levels. On the one hand, at the first and preliminary level, the audience creates media messages on topics and questions such as who? What techniques does he use? On the other hand, at a deeper level, the audience considers the values and lifestyles hidden in the message (Arjmandi, 2006: 34).

A combination of Lasswell's approach to communication and Hobbs' approach to media

literacy can be made, and in this blended model, two layers are formed as follows:

1- Internal and central layer: In this layer, the values and lifestyles presented in the message are examined. This layer contains the more hidden features of the message, and understanding media literacy based on it is more complicated than the outer layer. An audience with more and more in-depth knowledge can recognize the values and lifestyles of overt and covert messages. Lifestyle means "actions and works that are classified in a certain way and are the result of specific perceptions. It includes those priorities of individuals that are practically visible (Ghasemi, 2006: 70)". An audience with media literacy is able to recognize the life that the media exerts on their thoughts, actions, and life.

2- Outer and outer layer: In this layer, Lasswell's media communication's main components are "who says? Whom is he talking to? What is he saying? How does he say? What does he say? What effect does it have?" "Arises. In this way, the audience with media literacy can identify the message's creators (directors, actors, producers, policymakers, writers, etc.) (Who says?) This audience can understand the technical dimensions of producing and presenting a message (how to compile, lighting, assemble, etc.), the aesthetic dimension that Potter wants (how he says it). Also, the audience with media literacy is able to understand the purpose of the messengers (political, economic, social and cultural) (What he says and why he says it), and it's up to you to decide for which group of audiences the message was prepared (for whom they are speaking). In addition, having media literacy gives the audience the power to determine how effective the message is and identify the harmful or positive effects (What effect does it have?)(Hassanzadeh, 2017: 120).

3- According to Elizabeth Tommen and colleagues, media literacy acts as a judgment filter; as the dense world of message passes through the layers of the media literacy filter, the shape of the encounter with the message becomes significant. According to Tommen, the media message works in three layers:

The first layer: the importance of personal planning in how to use the media in the sense that the audience pays more attention to the selection and viewing of different types of programs; it specifically uses television, video, electronic games, movies and other media and reduces consumption.

Layer 2: At this level, the audience pays attention to the media's more intangible aspects and to deep questions and issues like: who makes media messages? What is the purpose of sending a message? Who benefits from sending messages, and who loses?

Layer 3: This layer is the skills needed to watch the media critically. With these skills, the audience analyzes and asks questions about the context of the message and the aspects embedded in it. (Taghizadeh, 2011).

Definition: As the layers deepen, the audience's media literacy rate increases; in the first layer, the audience needs to have a diet in using the media. According to the messenger features in the second layer, some of the messages that are desirable to the audience are selected, and the rest of the messages are ignored. The third layer also reviews media messages. Therefore, by giving a special ability to the audience, media literacy turns it into an active state against any written or visual and audio text from a passive mode.

According to James Potter, media literacy is a multifactorial model and knowledge structures. The personal source of information processing tasks and skills and abilities is his media literacy model's agents. According to Potter, the relationship between these factors is spatial (not superficial); in each cross-section, one of the factors of media literacy is located, and so each factor supports the other (Hamed, 2012).

McQuail believes that finding insights into the circumstances of others, social empathy, and identifying with others and gaining a sense of belonging, finding a basis for conversation, social interaction, filling the place of a true companion in life, helping to play social roles empowering individuals to connect with family, friends, and community are some of the services that the media provides. And by finding media literacy, they can strengthen social solidarity (McQuail, 2009).

In this way, the mass media, by reducing social isolation and strengthening the common

feeling with members of society, creates a kind of sense of belonging, so that the identity of the society is at the top of the identities; as a result, public commitment is strengthened, and this, in turn, increases capital in society (Chalabi, 2016).

Theoretical framework of research

In their theory, Sudore & Schillinger introduced the best strategies as health literacy strategies to benefit all patients, especially patients with insufficient health literacy in the educational process. According to these thinkers, health literacy strategies generally use simple and understandable language (Sudore & Schillinger, 2009). According to Potter, "media literacy" consists of various factors: "knowledge structures", "audience position," and "message processing" that support each other. Compared to other models, this model can further examine the audience's knowledge of the media, the skills needed to use the media, and most importantly, the message's semantic system. These skills affect different aspects of a person's life, including health and quality of life. James Potter also considers media literacy to have four dimensions: cognitive, emotional, moral, and aesthetic. (Zare Kohan, 2014).

Therefore, the main hypothesis is derived from the theories of Sudore & Schillinger and Potter, which state that: there is a connection between media literacy and citizens' health literacy (figure1). Also, according to the media literacy indicators, which include media information evaluation, targeted use of media, information composition, information exchange, and media information evaluation, the following sub-hypotheses are extracted:

- There is a relationship between the evaluation of media information and health literacy among citizens.
- There is a relationship between targeted media use and health literacy among citizens.
- There is a relationship between the combination of information and health literacy among citizens.
- There is a relationship between information exchange and health literacy among citizens.
- There is a relationship between the use of media and health literacy among citizens

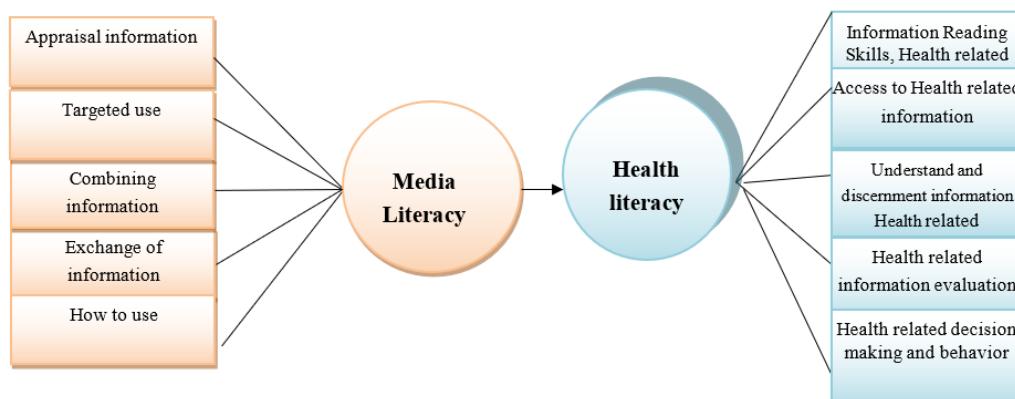


Figure 1. Theoretical model of research

Research Methods

The present study, which aims to investigate the relationship between media literacy and health literacy of the citizens of the city of Bandar Abbas, is practical in terms of the type of goal, broadly in terms of width, minor in terms of scope and cross-sectional in terms of time.

This investigation is a small study based on the type of data collected and analyzed and is field research in terms of the type of approach to the problem under study and its entry into it. The technique used in this study is a survey. In the field research, a questionnaire was used

to collect the required information. Prior to the survey, the initial questionnaire was tested and, using the results obtained, the existing defects were eliminated and the final questionnaire was prepared.

The statistical population of the present study consists of 18-year-old and above citizens from the Bandar Abbas city. According to the 2016 census, the city's population is 526,648, and the population of 18 years and older citizens as a statistical population of the present study is about 420 thousand people. Since it was not naturally possible to study the views of all residents, the sampling method was used to explain the views of the subjects, and based on Cochran's formula, a number of individuals (384 people), who were identified as representing the statistical population, were selected and studied as a sample.

This study's sampling method is a two-step sampling method using cluster sampling and then simple random sampling. After collecting the data, their analysis was performed using SPSS and PLS Smart statistical software, and in this regard, statistical tests appropriate to each hypothesis were used to test the hypotheses.

In this regard, to ensure the necessary validity, the relevant professors and experts have consulted and used the Cronbach's alpha test to ensure the questionnaire's reliability. Based on the alpha coefficient, the reliability coefficient of all variables is higher than 0.7.

Table1. Reliability of the final questionnaire based on Cronbach's alpha coefficient

Value	Indicator	Alpha coefficient
media literacy	Evaluate media information	852/0
	Targeted use of media	793/0
	Combining information	842/0
	Exchange of information	721/0
	How to use media	725/0
health literacy	Health reading skills	825/0
	Access to health-related information	814/0
	Understand health information	725/0
	Evaluate health-related information	714/0
	Health-related decision-making and behavior	752/0

In Oxford culture, media literacy is defined as follows: "media literacy is the ability to access, analyze, evaluate and create relationships in a variety of ways, knowledge, understanding and experience of various forms of media; Qualifications in the use of different media and the ability to think critically about them. Level of skill and competence in using media devices" (Babran, 2003: 45).

Operational Definition: Media literacy in this study, information evaluation indicators, information composition, targeted use, information exchange, and how to use media, have been studied.

Conceptual definition: Health literacy (health) as cognitive skill and as an important and influential issue in the health care system was first introduced in 1974 in a health education panel. Since then, the concept has been discussed and researched in many cases by researchers in the fields of literacy and health, and various definitions have been provided for it. Health literacy is commonly defined as a wide range of knowledge and skills in the field of acquiring, processing, understanding, and using health information. (Tehrani Bani Hashemi et al., 2007: 54).

Operational definition: In the present study, health literacy was examined with health reading skills reading indicators, access health-related information, understanding health-related information, evaluating health-related information and health-related decision-making

and behavior.

Results and Discussion

Descriptive statistics

The sex variable's abundant results show that 54.16% of the subjects studied were female and the other 45.84% were male.

The variable marital status's abundant results show that 59.90% of the people studied are married and the other 40.10% are single.

The high results of the variable of education also show that 0.23 percent of the respondents have below-diploma and diploma literacy, 0.28 respondents with an associate's degree, 0.40 respondents with a bachelor's degree, and 0.9 percent of the respondents have a master's degree or higher.

Also, the frequency results of age variable show that 0.16 respondents are 18 to 20 years old, respondents 21.0 to 29 years old, 0.21 respondents 30 to 35 years old, 0.15 respondents 35 to 40 years old, 0.16 respondents 40 to 49 years old, 0.8 respondents 50 to 60 years old and 0.3% respondents are 60 years and older.

Descriptive statistics of media literacy variable and its dimensions

Table 2. Distribution of respondents according to media literacy and its dimensions

Average	very much		Much		medium		little		very little		Media literacy components
	Percent age	Abundance									
2/86	5/21	20	17/96	69	45/31	174	20/57	79	10/94	42	Media information evaluation
3/15	13/02	50	27/35	105	25/26	97	31/51	121	2/86	11	Targeted use of media
3/06	11/98	46	26/04	100	31/51	121	17/19	66	13/28	51	Combining information
3/03	10/41	40	27/34	105	30/46	117	16/15	62	15/62	60	Information exchange
3/21	12/5	48	28/65	110	31/25	120	22/65	87	4/95	19	How to use media
3/06											media literacy

The table of media literacy variables and its components shows that the highest average is related to how to use media (3.21), and the lowest average is related to media information evaluation (2.86). The average targeted use of media (3.15), the combination of information (3.06), and information exchange (3.03) and the overall average of media literacy (3.06) are average.

Table 3. Distribution of respondents according to health literacy and its dimensions

Health literacy components	very little		little		medium		much		very much		Average
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage	
Reading skills health information related	44	45/11	66	19/17	121	51/31	110	65/28	43	20/11	11/3
Access to health-related information	29	55/7	20	21/5	163	45/42	90	43/23	82	35/21	42/3

Understand and discernment information Health related	20	20/5	63	41/16	160	66/41	90	44/23	51	28/13	23/3
Health related information evaluation	56	58/14	67	46/17	138	93/35	81	09/21	42	94/10	96/2
Health related decision making and behavior	27	03/7	44	46/11	122	77/31	141	72/36	50	02/13	37/3
health literacy											22/3

The table of health literacy variable and its components shows that among the components of health literacy, the highest average is related to access to health-related information (3.42), and the lowest average is related to the evaluation of health-related information (2.96).

Inferential statistics

There are prerequisites for using parametric tests, which are: the condition that the data is normal. Kolmogorov-Smirnov single-sample test is used to check the normalization of the agents.

H_0 : The data is typically distributed

H_1 : Data does not have a normal distribution

Table 4. Kolmogorov-Smirnov test to determine whether the research variables are normal

Subscales	Media information evaluation	Targeted use of media	Combining information	Exchange of information	How to use media	health literacy
Indicator						
Number	384	384	384	384	384	384
Kolmogorov-Smirnov values	70/2	98/2	54/2	01/3	60/3	12/2
Significant level (two domains)	088/0	12/0	097/0	083/0	16/0	23/0

According to Table 4, it can be concluded that since the values of the significance level of all research variables are more than 0.05, it can be said that this factor conveys the normality of data distribution and in the analysis of research hypotheses, parametric tests can be used.

Testing the hypotheses

There is a relationship between media literacy and its various dimensions (information evaluation, information composition, purposeful use, information exchange and how to use media) with health literacy.

Pearson correlation coefficient test has been used to evaluate the research hypotheses about the relationship between media literacy and its various dimensions (information evaluation, information composition, purposeful use, information exchange and how to use media) with health literacy.

The findings are as follows.

Table 5. Correlation between independent and dependent research variables

Variable name	Indicator Alpha coefficient	health literacy	
		Significant level	
media literacy	Evaluate media information	42/0	000/0
	32/0	000/0	
	37/0	000/0	
	28/0	000/0	
	26/0	001/0	
	36/0	000/0	

The findings suggest that there is a positive, direct, and significant relationship between all dimensions of media literacy and its overall level with health literacy from the citizens' point of view. Meanwhile, the relationship between media information evaluation and health literacy ($P = 0.42$) has the highest correlation coefficient and the relationship between how to use media and health literacy has the lowest correlation coefficient ($P = 0.26$). Also, the relationship between information composition ($P = 0.37$), purposeful use of media ($P = 0.32$), and information exchange ($P = 0.28$) with health literacy from the citizens' point of view have a positive and significant correlation coefficient. Therefore, it can be argued that the higher the level of media literacy ($P = 0.36$) and its dimensions, the higher the level of health literacy of citizens, and all the hypotheses of the present study are confirmed.

Structural Equation Model (Smart PLS)

In order to determine the intensity and direction of media literacy and health literacy, the citizens of the city of Bandar Abbas have used a structural equation model. In this research, using the structural equation modeling method, the research's structural equation model is tested. The approach in this section is a two-step approach. This means that after formulating the theoretical model, it is necessary to discuss the estimation of the model or, in other words, the estimation of free parameters in the model, and the analysis of partial and general indicators of the model to determine whether the experimental data together support the developed theoretical model.

The modeling of structural equations using the least squares (PLS) method, unlike the covariance-based method (software such as AMOS, LISREL, and EQS), does not have the index of fit of the Chi-squared model to check the compatibility of the theoretical model with the collected data. It depends on the nature of the PLS axis. Therefore, the index of fit developed along with this approach is related to the adequacy of the model in predicting dependent variables; such as Communality and Redundancy indicators or GOF indicators. In fact, these indicators show to what extent they can predict their infrastructure for the model of measuring reagents and for the structural model, to what extent and with what quality are the exogenous variables able to predict the endogenous variables of the model.

Estimates related to the generality evaluation indicators of the structural model and the main parameters of this model (the effect of media literacy variable on citizens' health literacy) are reported in the following figures and tables:

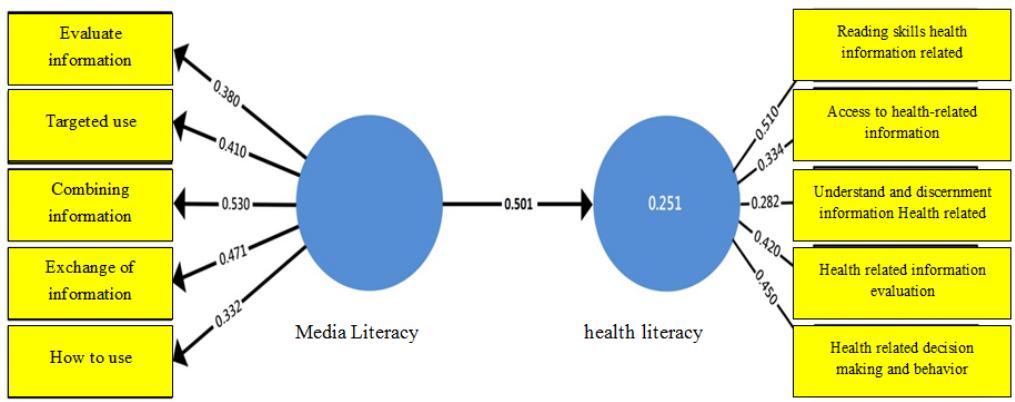


Figure 2. The structural equation model of the effect of media literacy on citizens' health literacy

Table 6. Estimation of Generality Evaluation Indicators of Structural Equation Model

Indicator	GOF	SRMR	NFI
Value	80/0	085/0	92/0

The Generality Evaluation Indicators of the Structural Equation Model together generally indicate that the data support the theoretical model of the research. In other words, the index of fit data to the model is established, and the indicators indicate the desirability of the structural equation model.

Table 7. Estimation of the effect of media literacy variable on health literacy

Independent variable	path	Dependent variable	Determination coefficient	Effect coefficient	The critical value	significance level
media literacy	<---	health literacy citizens	25/0	501/0	½	001/0

The estimated values in the table above indicate:

1- The media literacy variable of 0.501 of the variance variable explains the citizens' sense of health literacy. By considering the values related to the volume of the index's effect, the coefficient of determination of this value is estimated at an average (0.25). In other words, the media literacy variable in different dimensions has the average ability to explain the variance of the citizens' health literacy variable. 2) The effect of the media literacy variable on health literacy is statistically significant. Therefore, the general research hypothesis that the media literacy variable affects citizens' health literacy variable is confirmed. According to the value of the effect coefficient, it can be said that the effect of media literacy variable on the health literacy variable of positive, direct, and average citizens is estimated. This means that increasing the level of media literacy can, on average, strengthen citizens' health literacy.

Conclusion

As mentioned, high health literacy regulates people's health and nutritional behaviors and will reduce harmful behaviors. Moreover, doing preventive and self-care behaviors are also directly related to health literacy in society. If health literacy is promoted in the community, the number of visits to the doctor will decrease, and the patient's medical expenses and health system will be reduced.

Due to the importance and necessity of discussing health literacy, the present study analyzed the relationship between media literacy (with information evaluation indicators, information composition, targeted use, information exchange, and how to use media) and Bandar Abbas citizens' health literacy a dependent variable.

The findings suggest that there is a positive, direct, and significant relationship between all dimensions of media literacy and its overall level with health literacy from the citizens' point of view. Meanwhile, the relationship between media information evaluation and health literacy ($P = 0.42$) has the highest correlation coefficient, while the relationship between how to use media and health literacy has the lowest correlation coefficient ($P = 0.26$). Also, the relationship between information composition ($P = 0.37$), purposeful use of media ($P = 0.32$), and information exchange ($P = 0.28$) with health literacy from the citizens' point of view has a positive and significant correlation coefficient. Therefore, it can be argued that the higher the level of media literacy ($P = 0.36$) and its dimensions, the higher the level of health literacy of citizens and all the hypotheses of the present study are confirmed.

The Smart PLS model results also showed that the media literacy variable explains a total of 0.50 of the variance of the health literacy variable. By considering the values related to the volume of the effect of the index, the coefficient of determination of this value is estimated at an average (0.25). In other words, the media literacy variable in different dimensions has the average ability to explain the variance of the health literacy variable.

The present study's findings are consistent with the findings of Masoumizadeh Dezfuli (2016) and Tehrani (2016). In their findings, each of the researchers found a link between media literacy and health literacy. The research findings are also consistent with Sudore & Schillinger's and Potter's theories. In their theories, each of the above thinkers has pointed to media literacy's role in increasing health literacy, and they believe that media literacy increases health literacy among people. Therefore, it is observed that media literacy is one of the important sources in increasing health literacy among the people, and with the increase of media literacy in various dimensions, the level of health literacy increases. The media play a vital role in promoting health literacy in society, and many people take their health literacy from the media, especially the national media. Now, due to the increase in radio and television programs in the field of health, this effect has definitely increased more than before. With the position that mass media have found from birth to death in today's human life, they can be considered as social institutions and one of the major factors influencing the acceptance of social norms and values. As a result, they have a significant impact on people's attitudes toward the events around them, and media literacy should be strengthened to make the most of the media.

Therefore, considering the positive relationship between media literacy and health literacy, it should be suggested that media literacy does not belong to a specific class, but is all-encompassing and inclusive and includes all members of society at all levels and classes. Countries such as Japan and Canada, which are leaders in media literacy, have made media literacy one of their school subjects. Otherwise, even most students, especially communication students, are not familiar with this term in our country. However, due to the growing importance of media literacy in society and the expanding trend in this field, the need for familiarity and use of this term (media literacy) has become more relevant than ever. This can be especially helpful in terms of health and quality of life, which are some of the most important aspects of a person's life.

Consumers of the media should also be encouraged to think that media literacy, as one of the most important phenomena of the information and communication age, has emerged to help the audience raise information and awareness. Also, consumers should try not to use the media out of habit and just for fun and entertainment rather, with the necessary insight, awa-

reness, and knowledge, so they produce and interpret messages and are not mere consumers.

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