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# A Qualitative Study On People's Experiences Of Covid-19 Media Literacy

## **ABSTRACT**

The coronavirus disease (COVID-19) outbreak has been associated with many psychological and social effects, followed by a rise of fake news and false information about the condition. This study's main aim was to deeply understand people's experiences and precise opinions about social media information on COVID-19. This qualitative study was conducted to examine the COVID-19 social media literacy using the content analysis. Participants in the study were 20 people from Hamadan Province, Iran. Data were analyzed using the MAXQDA software version 2010. Considering the results for the volume of social media literature about COVID-19, 21 subcategories and five categories were obtained. The five categories included purpose with three subcategories such as „sales for economic gain“, constructedness with five subcategories such as profiteering „advertising companies“, audience with one subcategory such as „all people“, format with five subcategories such as „highlighting the disease consequences“, and lifestyles with seven subcategories such as „drinking alcohol“. Familiarity with individuals' views based on culture and context for designing and planning educational literacy programs for media skills and competence in the new media age for distinguishing between fake and credible COVID-19 media messages and critically evaluating media content for all people is essential especially in the new media infodemic ecosystem. The themes obtained in the study can be used for designing educational interventions and appropriate assessment tools as well as promoting health media literacy in the field.

## **KEY WORDS**

Media Literacy. Social Media. Health. Coronavirus. Self-care. Content Analysis.

# 1. Introduction

Similar to other countries in the world, access to the Internet has increased in Iran in 2020. Presently, 69 % of Iran's population have access to the Internet,<sup>1</sup> and there is a wide range of social media messages and the tendency to use the media among Iranians. Our understanding of social media danger and probable harm is critical in acquiring media literacy and gaining skills to analyze media messages and posts.<sup>2</sup> Media literacy skills refer to one's abilities to manage their media activities and consciously expose themselves to the media.<sup>3,4</sup> Examining studies' results on the effect of education programs on media literacy to prevent high-risk behaviors<sup>5,6</sup> revealed the need to implement health interventions to enhance media literacy.

In Iran, individual efforts were made to turn social media threats into valuable opportunities. Coronavirus disease was announced as an international public health concern from January 30, 2020. The disease is suggested to have a zoonotic source. Since April 29, 2020, 213 countries around the world have reported 3,023,788 COVID-19 mortality cases and 208,112 COVID-19 confirmed deaths.<sup>7</sup> As a result, the healthcare monitoring and care system in Iran expanded its diagnostic activities. In general, people in Iran are either banned or restricted from many activities based on the protocols and programs of the National Taskforce for Combating the COVID-19.<sup>8</sup>

All the society's industries were forced to lockdown due to the COVID-19 pandemic. The spread of fake news, untrustworthy media messages, and infodemic related to COVID-19 in cyberspace misled the audience. Researchers believe that a wide variety of information disseminated in cyberspace is closely related to the new „infodemia“ ecosystems of the 21st century characterized by social media and has significant potential to harm users.<sup>9,10,11,12</sup>

<sup>1</sup> *Internet User and Penetration Worldwide 2014-2020*. [online]. [2020-09-23]. Available at: <<https://www.emarketer.com/chart/187880/internet-users-penetration-worldwide-2014-2020-billions-of-population-change>>.

<sup>2</sup> KESLER, T. et al.: What's Our Position? A Critical Media Literacy Study of Popular Culture Websites with Eighth-Grade Special Education Students. In *Reading & Writing Quarterly*, 2016, Vol. 32, No. 1, p. 1. [online]. [2020-09-23]. Available at: <<https://www.tandfonline.com/doi/abs/10.1080/10573569.2013.857976>>.

<sup>3</sup> LUNT, P., LIVINGSTONE, S.: *Media regulation: Governance and the interests of citizens and consumers*. California : Sage, 2011, p. 33.

<sup>4</sup> SOLHI, M. et al.: Application of media literacy education for changing attitudes about self-medication of slimming supplements. In *Medical Journal of the Islamic Republic of Iran*, 2017, Vol. 31, No.1, p. 792. [online]. [2020-08-8]. Available at: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6014786/>>.

<sup>5</sup> VAHEDI, Z. et al.: Are media literacy interventions effective at changing attitudes and intentions towards risky health behaviors in adolescents? A meta-analytic review. In *Journal of adolescence*, 2018, Vol. 67, p. 140. [online]. [2020-08-20]. Available at: <<https://www.sciencedirect.com/science/article/abs/pii/S0140197118301003>>.

<sup>6</sup> XIE, X. et al.: A meta-analysis of media literacy interventions for deviant behaviors. In *Computers & Education*, 2019, Vol. 139, p. 146. [online]. [2020-07-20]. Available at: <<https://www.sciencedirect.com/science/article/abs/pii/S036013151930123X>>.

<sup>7</sup> *Novel-coronavirus-2019*. [online]. [2020-07-29]. Available at: <<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>>.

<sup>8</sup> *Daily Situation Report on Coronavirus disease (COVID-19) in Iran*. [online]. [2020-07-29]. Available at: <<http://corona.behdasht.gov.ir/>>.

<sup>9</sup> CINELLI, M. et al.: The covid-19 social media infodemic. In *Scientific Reports*, 2020, Vol. 10, No. 1, p. 1. [online]. [2020-07-20]. Available at: <<https://arxiv.org/pdf/2003.05004.pdf>>.

<sup>10</sup> PENNYCOOK, G. et al.: Fighting COVID-19 misinformation on social media: Experimental evidence for a scalable accuracy nudge intervention. In *Psychological Science*, 2020, Vol. 31, No. 7, p. 770. [online]. [2020-07-27]. Available at: <<https://journals.sagepub.com/doi/full/10.1177/0956797620939054>>.

<sup>11</sup> ALLAHVERDIPOUR, H.: Global Challenge of Health Communication: Infodemia in the Coronavirus Disease (COVID-19) Pandemic. In *Journal of Education and Community Health*, 2020, Vol. 7, No. 2, p. 65. [online]. [2020-07-27]. Available at: <[http://jech.umsha.ac.ir/browse.php?a\\_id=1000&sid=1&slc\\_lang=en](http://jech.umsha.ac.ir/browse.php?a_id=1000&sid=1&slc_lang=en)>.

<sup>12</sup> DEPOUX, A. et al.: The pandemic of social media panic travels faster than the COVID-19 outbreak. In *Journal of Travel Medicine*, 2020, Vol. 27, No. 3, p. 1. [online]. [2020-08-10]. Available at: <<https://academic.oup.com/jtm/article/27/3/taaa031/5775501>>.



PICTURE 1: Example of Lifestyles, values, and points of view are represented in, or omitted from, Covid-19 Media Messages. (Credible messages about Covid-19 for safe shopping in corona crisis).

Source: Umsha. [online]. [2021-02-06]. Available at: <<http://webda.umsha.ac.ir/index.aspx?siteid=10&pageid=39284>>.

Traditional media are more trusted than social networks. Radio (70 %), television (66 %), and printed newspapers and news magazines (63 %) are more trusted than social networks and messaging applications (36 %).<sup>13</sup> Moreover, there are limited studies on this new global issue, especially when we keep receiving a lot of COVID-19 news and media messages. The requirement for clear and factual information in the form of critical thinking and media literacy will reduce misinformation about COVID-19 and negative impacts on individuals. Therefore, this study's main aim was to profoundly understand people's experiences and opinions about COVID-19 media literacy.

## 2. Methodology

This study was conducted from April, 2020, to June, 2020, among people in Hamadan Province, Western Iran.

The researchers selected the participants using purposive sampling with maximum diversity in terms of age and occupation and the amount of media use to achieve various opinions. This sampling strategy was applied to increase data comprehensiveness and richness and the transferability of the study. As recommended in qualitative studies, sampling needs to be continued as long as new information is received by entering new people to the study.<sup>14,15</sup>

<sup>13</sup> HOSSOVÁ, M.: Fake News and Disinformation: Phenomenons of Post-Factual Society. In *Media Literacy and Academic Research*, 2018, Vol. 1, No. 2, p. 27. [online]. [2020-02-01]. Available at: <[https://www.mlar.sk/wp-content/uploads/2019/01/MLAR\\_2018\\_2\\_3\\_Fake-News-and-Disinformation-Phenomenons-of-Post-Factual-Society.pdf](https://www.mlar.sk/wp-content/uploads/2019/01/MLAR_2018_2_3_Fake-News-and-Disinformation-Phenomenons-of-Post-Factual-Society.pdf)>.

<sup>14</sup> STREUBERT, H. J., CARPENTER, D. R.: *Qualitative research in nursing: Advancing the humanistic imperative*. Philadelphia : Lippincott Williams & Wilkins, 2011, p. 33.

<sup>15</sup> BENGTTSSON, M.: How to plan and perform a qualitative study using content analysis. In *Nursing plus Open*, 2016, Vol. 2, p. 8. [online]. [2020-08-10]. Available at: <<https://www.sciencedirect.com/science/article/pii/S2352900816000029>>.

The data saturation was reached after 20 interviews, and therefore, the total number of the study participants was 20.

All participants submitted their written informed consent after being assured of the voluntary nature of their participation, their right to withdraw from the study at any time and stage, and the confidentiality of all their information. It should be noted that each participant took a pseudonym for privacy purposes.

The inclusion criteria were as follows: resident in Hamadan Province, willingness to participate in the study, ability to respond and participate in the study, and access to social networks and the Internet. The exclusion criteria were the participants' non-cooperation in conducting full interviews for qualitative research and their absence in the specified place for two follow-up interviews.

As mentioned above, after explaining the research objectives to the participants, written informed consent was obtained. To collect the data, the semi-structured interview method was applied through an interview guide. Interviews were initiated using several open-ended questions based on the interview guide, followed by exploratory questions to reach more clarity. A Ph.D. student majoring in health education and promotion conducted all interviews individually and face-to-face. Before the interviews, the interviewer acquired sufficient skills to interview the participants equally and appropriately. All interviews were recorded with two digital recorders. Examples of the interview questions are as follows:

What do you think about the purpose of producing COVID-19 media messages, and why are these messages created? In your opinion, who are the creators of COVID-19 media messages? In your opinion, what factors affect selecting the audience for COVID-19 media messages? In your opinion, what lifestyles, values, and points of view are represented in or omitted from COVID-19 media messages? In your opinion, what format and technique are used to attract the audience's attention to COVID-19 media messages? How are COVID-19 media messages different in local and social media networks compared to other media?

Each interview lasted from 30 to 40 min. The interviewer audio-recorded the interviews and later transcribed them verbatim. It is essential to note that the questions and the interview guidelines were designed based on CML's educational framework (Media Literacy Training Center of the American).<sup>16</sup> Data collection in the present study was based on planning and performing qualitative research using content analysis.<sup>17</sup> Note-taking and memoing were used to record more detailed information. Before audio recording each interview, the participants were asked to read and sign an informed consent form. The interviewees could ask any question during the interviews. The interviewer would pause recording during the interview if the interviewees wanted to comment on the record. The participants were asked for their consent to use direct quotes from the interviews in any reports or presentations without mentioning their names. The Ethics Committee of the Hamadan University of Medical Sciences, Iran, approved the study (approval identification code no. IR.UMSHA.REC. 1399.229).

Data analysis was performed using repeated reading and constant comparisons based on the approach developed by Graneheim and Lundman (2004) using MAXQDA software version 2010 (VERBI GmbH Company, Berlin, Germany).

Accordingly, after verbatim transcription of all recorded interviews, words, sentences, and paragraphs concerning the research objectives were considered and coded. At this stage, some attempts were made to identify the maximum possible codes proportional to the data. Two investigators performed the analysis separately to increase the validity and then discussed their

<sup>16</sup> THOMAN, E., JOLLS, T.: *Literacy for the 21st century: An overview and orientation guide to media literacy education*. [online]. [2020-08-10]. Available at: <[http://www.medialit.org/sites/default/files/01\\_MLKorientation.pdf](http://www.medialit.org/sites/default/files/01_MLKorientation.pdf)>.

<sup>17</sup> BENGTTSSON, M.: How to plan and perform a qualitative study using content analysis. In *Nursing plus Open*, 2016, Vol. 2 , p. 8. [online]. [2020-08-10]. Available at: <<https://www.sciencedirect.com/science/article/pii/S2352900816000029>>.

results and reached consensus. The analysis moved back and forth in collaborative meetings and through the authors' discussions to reach final codes. Based on qualitative methods, data collection was terminated after reaching the data saturation.

After reading out the codes repeatedly and eliminating repetitive ones, similar codes were merged along with data classification. Then, main subcategories and categories were obtained considering media literacy.

Guba and Lincoln's (1994) method was used to increase the data's accuracy and strength in the present study. The researcher also attempted to 1) select eligible participants carefully, 2) have close, continuous, and long-term contact with them, 3) engage participants in the data interpretation process (reviewed by member checking), and 4) use faculty members' and participants' opinions in various stages of the study, especially while extracting codes, conducting final reviews (peer checking), and determining reliability. Moreover, the researcher attempted to increase the study's credibility as far as possible by maintaining documentation at all research stages and making it possible to examine other processes by clarifying methodological decisions. The researcher also attempted to provide dependability analysis with a detailed and complete description of the research process. The researcher provided a context for others' judgments and evaluations concerning transferability using a comprehensive and full description of the study setting, conditions, participants, and data analysis method.

### 3. Results

Interviews were conducted with 20 people from Hamadan Province with an average age of 35 to 45 years ( $\pm 10.17$ ), of whom 55 % were female. In this study, of the individuals, almost 40 % were married, 40 % had a B.S degree, 40 % were employees, and 45 % were residents in Hamadan City. Also, among the individuals, 70 % had a high computer access history, and 65 % had a high Internet access history. 60 % regularly used the Internet (active Internet users), and 50 % used social networks for socializing, passing time, having fun, and obtaining information. Considering the results of dimensions and factors related to COVID-19 media literacy in this study, eventually, 43 subcategories and five categories emerged from the data analysis (Table 1 and Fig. 1).

Main categories	Categories	Subcategories	Samples of Codes	
Cognitive and emotional	Purpose of Covid-19 Media Messages being created	Increased awareness and health literacy about coronavirus	Increase information and knowledge about the new disease, create awareness and sensitivity to follow the protocols, create fear and panic, marketing, reduce social cohesion, raise followers, and visit social media.	
		Maintaining or improve community health		
		Economic, political, and personal purposes		
	Constructedness of Covid-19 Media Messages	World health organization		The Ministry of Health, experienced specialists in the field of infectious diseases, public health organizations, medical sciences universities, advertising Companies, shareholders and marketers of sanitary ware and disinfectants products, political gaining to harm.
		Organization and administration of health Community Services		
		Beneficiary profiteers		
Sanitary ware, industrial and domestic disinfectants				
The audience of Covid-19 Media Messages	Political Profiteers			
	The general public with any level of awareness, information, and income	The needs and demands of individuals to increase awareness and information, people concerned about health, curiosity, sensation-seekers, and people with easy and uncomplicated ways of influencing and attracting, people with more time on hobbies and engaging with cyberspace, naive people.		
Aesthetic and moral	Format and technique are used to attract the audience's attention to Covid-19 Media Messages	Highlighting the consequences of the disease	Using documentary information by mentioning a reliable source, spreading information in the most accessible way such as using popular software to circulate the data, e.g., Instagram and the use of overt claims, using techniques to cause fear and sensitivity, repeating content in a variety of media and social media channels, use of humor and animation about corona disease, using actors to promote specific disinfectants, focusing on a particular brand and reputation	
		Persuasion methods and techniques		
		Education non-complex prevention activities		
		Trust-Building		
		Facilitate communication		
	Lifestyles, values, and points of view are represented in, or omitted from, Covid-19 Media Messages	Healthy lifestyle	The effectiveness of using microwave or hairdryer to kill the virus, alcohol consumption to prevent the disease, claiming traditional and herbs ingredients to be useful for disease prevention such as drinking ginger and cinnamon tea, transmission food or bites, the commonality of the disease including the common cold, people are helping each other for prevention of disease, creating weakening of the virus over time, the effectiveness of drugs such as chloroquine and dexamethasone, mixing several types of surface disinfectants to eliminate viruses such as baking soda and Alcohol with Bleach, fasting to prevent infection.	
		Risky lifestyle		
		Environmental Factors role		
		Inevitable lethality		
		Herd immunity		
		The weakening of the virus		
		Social cohesion		

**TABLE 1:** Identifying people's views on Covid-19 Media Literacy

Source: Author collected from individuals' views on Covid-19 Media Literacy, 2020.

**Cognitive and emotional:** The cognition purpose for sending COVID-19 messages in social media, constructedness, and the audience of COVID-19 media messages were considered based on cognitive and emotional dimensions of media literacy.

### **The first category: the purpose for sending COVID-19 messages in social media**

During the interviews, many of the participants thought that the purpose of producing and sending credible COVID-19 messages in social media was to increase the awareness, health literacy, health self-care, economic, political and personal goals: „Familiarity with corona disease and raising awareness and information about coronavirus, moreover awareness in people to follow health protocols and health regulation.“ (Participant No. 1)

The participants also argued that the reason for producing fake COVID-19 media messages was to gain economic benefits: „I think their goal is some kind of marketing.“ (Participant No. 3) Moreover, the interviewees' beliefs about media misinformation was:

- creating chaos and disruption in the society;
- ignoring illness and health protocols by the community members;
- raising political issues, reducing social unity, and obtaining followers in social network platforms.

Raising political issues was mentioned as the main objective for producing fake COVID-19 media messages: „Sometimes this unscientific content was produced to intimidate and confuse the community, for example, a fake video of crying coronavirus nurse who posted on Instagram, saying that everyone is dying of COVID-19 and we don't have the facilities.“ (Participant No. 1)

The participants also argued that the reason for producing fake COVID-19 media messages was to gain personal benefits: „In my opinion, to increase the number of visitors and their followers on social network channels they want to show that we are well informed.“ (Participant No. 4) Another participant stated: „Sometimes celebrities want to be seen.“ (Participant No. 9)

### **The second category: the constructedness of COVID-19 media messages**

Another essential factor in COVID-19 media literacy was the constructedness of COVID-19 media messages. Some of the participants stated that the World Health Organization (WHO), and the administration of health community services, experienced infectious disease specialists, and active health associations were among the producers of credible COVID-19 messages: „Well, I mostly followed social network w university of medical sciences.“ (Participant No. 5) Another participant expressed: „The creators of scientific and credible content are people who are researchers or affiliated with the ministry of health and medical universities or related to medical associations.“ (Participant No. 6)

Most of the participants stated that fake COVID-19 media messages were made by beneficiaries such as sanitary ware producers, industrial and domestic disinfectant makers, and political profiteers: „There are contents in media which claims that if you consume these disinfectants or washing detergent, you will avoid virus infection.“ (Participant No. 8) Another participant mentioned: „Channels for marketing and the sale of disinfectants, drugs, vitamins, and herbal medicines are responsible for virus misinformation in social media.“ (Participant No. 9) The same participants also considered advertising companies to be among the makers of fake COVID-19 media messages.

### **The third category: the audience of COVID-19 media messages**

Another vital aspect of COVID-19 media literacy was the audience. The participants believed that the general public with any level of awareness, information, and income and according to their needs and demands were the audience of credible COVID-19 media messages. In this regard, one of the participants stated: „Because Coronavirus is a new issue and involves all individuals and sections of society, no one is safe from this disease, and it is changing how we live our daily lives.“ (Participant No. 11)

**Cognitive and emotional:** The diagnosis format and technique used to attract the audience's attention in COVID-19 media messages as well as lifestyles and values represented in or omitted from these messages were considered based on aesthetic and moral dimensions of media literacy.

### **The fourth category: the format and technique used to attract the audience's attention in COVID-19 messages**

One of the critical characteristics of COVID-19 media literacy is to convince and attract the target audience, using techniques and methods mentioned below.

**Highlighting the disease consequences:** it was a technique to encourage the audience to target COVID-19 media messages. „*Bolding the consequences of the disease, such as country's industries are being shut down and several thousand people have been infected in worldwide, encouraged people to follow the content of messages.*“ (Participant No. 6) they managed to persuade the audience to target media content.

**Using persuasion methods** such as using actors and techniques to cause fear and anxiety, repeating the content in a variety of media and social media channels, and using humour and animation in creating COVID-19 media messages. One of the participants said: „*I think these persuasive techniques employed to produce content that encourages people to use this media content, for example, techniques such as this content has repeatedly broadcasted in a different medias such as Television, radio, social networks, Instagram, etc.*“ (Participant No. 8) Another participant stated: „*For example, I saw a horrible atmosphere about COVID-19, and they paid a lot of attention to the number of deaths and mortality.*“ (Participant No. 1)

**Teaching simple preventive instructions and guidelines for public health** „*such as using frequent hands washed with ordinary soap and water, wearing a mask, avoiding leaving the house, etc.*“ (Participant No. 2)

**Building trust:** „*For example, I had seen credible content that said, 'If you think this content is not true, visit this university site or health organization, and they would generally publish the content with the source and reference.*“ (Participant No. 5)

**Facilitating communication** using available, popular, and easy-to-use social network media for the general public, such as Instagram, Telegram, WhatsApp, or TV and radio: „*I think the sources of this content, whether credible or fake sources about COVID-19 media Messages, are important, for example, using Instagram or Telegram; „Because they are so popular, they have so many users, and they are so much more accessible.*“ (Participant No. 3)

### **The fifth category: lifestyles, values, and opinions represented in or omitted from COVID-19 media messages**

Another aspect of COVID-19 media messages was lifestyles, values, and opinions represented in or omitted from COVID-19 media messages. In this regard, the participants became familiar with a healthy lifestyle, effects of drinking alcohol, the use of traditional and herbal ingredients, herd immunity, and gradual weakening of the virus through guidelines about lifestyles, values, and opinions which were represented in or omitted from COVID-19 media messages:

„*For example, some media messages have suggested that hair dryers can kill the coronavirus or that eating garlic can prevent infection with the coronavirus.*“ (Participant No. 19)

One of the participants said: „*I have seen some media messages that say antibiotics and certain medications can be effective in preventing or curing COVID-19, and alcoholic beverages help to prevent coronavirus infection.*“ (Participant No. 20)

## **4. Discussion**

This study aimed to deeply understand people's experiences and precise opinions about COVID-19 media literacy. Our findings indicated the dimensions of media literacy concerning COVID-19, including purpose, constructedness, audience, format, technique, and represented lifestyles. Similarly, some other studies have also achieved these dimensions and media literacy



items.<sup>18,19,20,21</sup> Furthermore, scholars have focused their attention on one of the four media literacy dimensions: cognitive, emotional, aesthetic, and moral. Each of these dimensions was thought to be independent of the others.<sup>22</sup>

This study's findings demonstrated that increased awareness in individuals played an essential role in producing credible COVID-19 media messages. In this regard, Latif et al. highlighted the role of social media as a powerful tool for social interaction, teaching, and learning.<sup>23</sup> Today, media and social networks are extensively used as an effective and efficient tool for fast information transfer, and also as online technologies for enhancing interaction and communication, sharing information, and providing feedbacks among individuals. Therefore, modern teaching methods based on social networks and web-based education are recommended to promote health education and disease prevention.

Besides, the purposes of producing fake COVID-19 media messages (mainly for economic gain) were mentioned in the present study. In this regard, Picard's book<sup>24</sup> attempts to enhance people's ability to understand and evaluate media companies' content and educate them about economic goals in such companies. It is significant to understand that companies create media using economic theories, various management tools, and media activities as an essential element to survive and gain benefits. Therefore, designing intervention methods to promote media literacy and individuals' ability to think critically appears to be necessary.

Another critical factor in COVID-19 media literacy is makers of COVID-19 media messages. Based on the present study's findings, the WHO and the organization of health community services are makers of credible COVID-19 media messages, aiming to ensure health promotion and well-being of people of all ages.<sup>25,26</sup>

In line with our results in Picard's book<sup>27</sup>, advertising companies are among the circulators of fake COVID-19 media messages. Also, Marinescu et al. in their book underlined the role of media, media companies, and healthcare companies as circulators of media messages related to human health.<sup>28</sup> It is important to note that it is nowadays essential to pay attention to the role of media on health and also to the effect of public health level on optimal functioning of individuals, especially the healthy media consumption. Therefore, it is necessary to develop health-promoting media literacy education with the use of health-oriented media messages.

<sup>18</sup> KARADUMAN, S.: The role of critical media literacy in further development of consciousness of citizenship. In *Procedia - Social and Behavioral Sciences*, 2015, Vol. 174, p. 3039. [online]. [2020-09-20]. Available at: <[https://www.researchgate.net/publication/277651825\\_The\\_Role\\_of\\_Critical\\_Media\\_Literacy\\_in\\_Further\\_Development\\_of\\_Consciousness\\_of\\_Citizenship](https://www.researchgate.net/publication/277651825_The_Role_of_Critical_Media_Literacy_in_Further_Development_of_Consciousness_of_Citizenship)>.

<sup>19</sup> PRIMACK, B. A. et al.: Adolescents' impressions of antismoking media literacy education: qualitative results from a randomized controlled trial. In *Health Education Research*, 2009, Vol. 24, No. 4, p. 608. [online]. [2020-08-10]. Available at: <<https://academic.oup.com/her/article/24/4/608/567504>>.

<sup>20</sup> HOBBS, R., FROST, R.: Measuring the acquisition of media-literacy skills. In *Reading research quarterly*, 2003, Vol. 38, No. 3, p. 330. [online]. [2020-08-10]. Available at: <<https://ila.onlinelibrary.wiley.com/doi/abs/10.1598/rrq.38.3.2>>.

<sup>21</sup> THOMAN, E., JOLLS, T.: Literacy for the 21st century: An overview and orientation guide to media literacy education. [online]. [2020-08-10]. Available at: <[http://www.medialit.org/sites/default/files/01\\_MLKorientation.pdf](http://www.medialit.org/sites/default/files/01_MLKorientation.pdf)>.

<sup>22</sup> POTTER, W. J.: *Seven Skills of Media Literacy*. California : Sage Publications, 2019, p. 70.

<sup>23</sup> LATIF, M. Z. et al.: Use of Smart Phones and Social Media in Medical Education: Trends, Advantages, Challenges and Barriers. In *Acta Informatica medica*, Vol. 27, No. 2, p. 133. [online]. [2020-08-10]. Available at: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6688444/pdf/AIM-27-133.pdf>>.

<sup>24</sup> PICARD, R. G.: *The economics and financing of media companies*. New York : Fordham University Press, 2011, p. 170.

<sup>25</sup> National protocols for COVID-19 prevention and control. [online]. [2020-07-06]. Available at: <<http://ird.behdasht.gov.ir/index.aspx?fkeyid=&siteid=419&pageid=62433&siteid=419>>.

<sup>26</sup> Novel-coronavirus-2019. [online]. [2020-07-29]. Available at: <<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>>.

<sup>27</sup> PICARD, R. G.: *The economics and financing of media companies*. New York : Fordham University Press, 2011, p. 170.

<sup>28</sup> MARINESCU, V.: *Media Coverage of Health and Illness in Romania. Health and the Media: Essays on the Effects of Mass Communication*. North Carolina : McFarland, 2016, p. 171.

Another vital factor in COVID-19 media literacy is the audience of COVID-19 media messages. Based on the present study's findings, individuals' needs and demands and media consumption were determining factors in the use of such media messages. In line with our results, Strömbäck et al. mentioned that media consumption referred to a situation in which a person was exposed to media for a certain period and used the media content according to their needs and demands.<sup>29,30</sup>

According to the present study's findings, other audiences of COVID-19 media messages were curious people. Zuckerman's book points out that the vital aspect of curiosity is the focus, and communication and learning will not occur without sufficient mental focus. Also, people's interest is related to their use of media and media activities.<sup>31</sup> Therefore, it appears necessary to develop health-promoting media literacy education with the focus on the consumption of health-oriented media messages.

Based on the findings, media techniques and persuasion highlight the disease consequences, teach non-complex prevention activities and strategies for the public and health community, build trust in the composition of COVID-19 media messages to attract and persuade the audience to pursue the media content. Jadayel et al. underlined that the media might sometimes use hazardous techniques to convince individuals about a particular product or idea.<sup>32</sup>

Also, other studies mentioned the use of popular and available media such as Instagram, Telegram, and YouTube to attract the audience to use media content, which is in line with the present study's findings.<sup>33,34,35</sup>

In general, companies use active methods of absorption and persuasion, such as marketing strategies and superb techniques, magical visual effects, and moments that bring excitement and competition into the virtual world, to attract new customers and audiences.<sup>36</sup>

Hence, designing and implementing new and promoted interventions along with producing creative health-oriented content are essential as a purposive and effective strategy for disease prevention and health promotion.

Drinking alcohol, consuming traditional and herbal ingredients, having healthy lifestyles, observing herd immunity, and using effective drugs for COVID-19 prevention and detection were among the viewpoints presented in or omitted from COVID-19 media messages. In line with these findings, the WHO recommended guidelines about the rational use of personal

<sup>29</sup> KOLTAY, T.: The media and the literacies: Media literacy, information literacy, digital literacy. In *Media, culture & society*, 2011, Vol. 33, No. 2, p. 211.

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<sup>34</sup> DJAFAROVA, E., RUSHWORTH, C.: Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. In *Computers in Human Behavior*, 2017, Vol. 68, p. 1. [online]. [2020-08-10]. Available at: <<https://www.sciencedirect.com/science/article/abs/pii/S0747563216307506>>.

<sup>35</sup> TAVOSI, M. et al.: Trust in Mass Media and Virtual Social Networks health information: a population study. In *Health Monitor Journal of the Iranian Institute for Health Sciences Research*, 2019, Vol. 18, No. 3, p. 231. [online]. [2020-08-10]. Available at: <<https://payeshjournal.ir/article-1-1083-en.html>>.

<sup>36</sup> ZWERMAN, S., OKUN, JA.: *Visual Effects Society Handbook: Workflow and Techniques*. New York, London: Focal Press, 2013, p. 50.

protective equipment for COVID-19.<sup>37</sup> Clay et al. underlined the risk of alcohol and alcohol abuse, dependence, and recurrence in individuals during the COVID-19 crisis, which are in agreement with the results of the present study.<sup>38</sup> It is important to note that the most reliable type of television journalism in media messages, referred to as „*artistic illusion addressed creatively in the minds of content producers*,“ is also found in COVID-19 media messages. In other words, what is observed is inevitably an illusion. Accordingly, an audience without media literacy skills and recognition tools may be attracted to a particular element and inevitably believe that what they see has happened in effect.<sup>39</sup> Therefore, media literacy helps people discover a concealed reality. Accordingly, designing media literacy promotion interventions will be useful in revealing hidden facts and selecting their aesthetic type.

As with other qualitative studies, this study's findings are not generalizable, which was one of the limitations of this study. Nevertheless, our results can pave the ground for practical interventions in COVID-19 media literacy.

## 5. Conclusion

It is essential to be familiar with individuals' views based on culture and context for designing and planning educational media literacy programs for media skills and competence in the new media age for distinguishing between fake and credible COVID-19 media messages and critically evaluating media content for all people. The themes obtained in the study can be used for designing educational interventions and appropriate assessment tools as well as promoting health media literacy in the field. Hence, future research need to discover other salient issues that informants may experience in relation to the subject. Moreover, further research should include participants with different backgrounds.

**Acknowledgement:** *The authors would like to acknowledge the participations of this study. The Research Ethics Committee approved this study of Hamadan University of Medical Sciences with a specific ID IR.UMSHA.REC. 1399.229 was funded by the Hamadan University of Medical Sciences (No, 9904102236) that participated in financial support of this study. This funding source had no role in the analysis and interpretation of data; in the writing of the article; nor in the decision to submit it for publication.*

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