

## THE CULTURAL DIMENSIONS OF THE COVID-19 PANDEMIC IN THE CITY OF BISTRITA (ROMANIA)

## AS DIMENSÕES CULTURAIS DA PANDEMIA COVID-19 NA CIDADE DE BISTRITA (ROMÊNIA)

## LAS DIMENSIONES CULTURALES DE LA PANDEMIA DE COVID-19 EN LA CIUDAD DE BISTRITA (RUMANÍA)

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### ABSTRACT

Disasters are unexpected events, triggered by natural or anthropogenic means, which cause material damage and human casualties. In addition to the technical, social, and economic dimensions, disasters also have cultural connotations, related to their perception, understanding, and acceptance by the community, the behavior of communities during the disaster, and the efforts made to return to normalcy. This is also the case with the Covid-19 pandemic, a biological disaster that triggered many reactions from the population about the origin of the new coronavirus, the meaning of the pandemic, the restrictions imposed by the authorities, the incoherence of the authorities in making decisions, the lack of medicines in hospitals, and pharmacies, about the treatment in hospitals, the reporting of infections, and deaths by health authorities, the content of the vaccine and the meaning of vaccination, etc. These cultural connotations can be traced in the present study, which was developed based on long observations made in the city of Bistrita in Romania.

**Keywords:** coronavirus, disaster, hazard, risk, disaster communication, social phenomenon, culture, social media, manipulation, conspiracy

### RESUMO

Desastres são eventos inesperados, desencadeados por meios naturais ou antropogênicos, que causam danos materiais e vítimas humanas. Além das dimensões técnica, social e econômica, os desastres também possuem conotações culturais, relacionadas à sua percepção, compreensão e aceitação pela comunidade, ao comportamento das comunidades durante o desastre e aos esforços realizados para retornar à normalidade. É também o caso da pandemia de Covid-19, desastre biológico que desencadeou muitas reações da população sobre a origem do novo coronavírus, o significado da pandemia, as restrições impostas pelas autoridades, a incoerência das autoridades em fazer decisões, a falta de medicamentos nos hospitais e farmácias, sobre o tratamento nos hospitais, a notificação de infecções e óbitos pelas autoridades de saúde, o conteúdo da vacina e o significado da vacinação, etc. Essas conotações culturais podem ser traçadas nas presente estudo, que foi desenvolvido com base em longas observações feitas na cidade de Bistrita na Romênia.

**Palavras-chave:** coronavírus; desastre; perigo; risco; comunicação de desastres; fenômeno social; cultura; mídia social; manipulação; conspiração

## RESUMEN

Los desastres son eventos inesperados, desencadenados por medios naturales o antrópicos, que provocan daños materiales y pérdidas humanas. Además de las dimensiones técnica, social y económica, los desastres también tienen connotaciones culturales, relacionadas con su percepción, comprensión y aceptación por parte de la comunidad, el comportamiento de las comunidades durante el desastre y los esfuerzos realizados para volver a la normalidad. Este es también el caso de la pandemia del Covid-19, un desastre biológico que desencadenó muchas reacciones de la población sobre el origen del nuevo coronavirus, el significado de la pandemia, las restricciones impuestas por las autoridades, la incoherencia de las autoridades al hacer decisiones, la falta de medicamentos en los hospitales y farmacias, sobre el tratamiento en los hospitales, la notificación de contagios y muertes por parte de las autoridades sanitarias, el contenido de la vacuna y el significado de la vacunación, etc. Estas connotaciones culturales se pueden rastrear en la presente estudio, que se desarrolló en base a largas observaciones realizadas en la ciudad de Bistrita en Rumania.

**Palabras clave:** coronavirus; desastre; peligro; riesgo; comunicación de desastres; fenómeno social; cultura; redes sociales; manipulación; conspiración

## 1.INTRODUCTION

Disasters are sudden and unexpected events, triggered in a natural or anthropogenic way, that cause material damage and human casualties (Qyarantelli, 1998; Perry, 2007). The Covid-19 pandemic is a biological disaster, officially declared by the World Health Organization, in March 2020. This disaster was triggered by the action of the SARS Cov-2 virus, which was reported in China (Wuhan, Hubei), in late 2019 (Ciotti et al. 2020; Morens et al., 2009), and generated a respiratory disease called Covid-19 (Li et al. 2020; Fauci et al. 2020).

In addition to the technical, material, social and economic dimensions, disasters also acquire cultural connotations, related to their perception, understanding, and acceptance by the population, their coexistence with them, and the return to normalcy of human communities after the extinction of these events. The importance of cultural factors in dealing with disasters and in establishing strategies for overcoming crises faced by humanity can be found in numerous specialized studies, which aim at perceiving risks and hazards, preparing for a possible disaster, living with disasters, and managing disaster ( Appleby-Arnold et al., 2018; Appleby-Arnold et al., 2020; Chamlee-Wright 2011; Bempah, Øyhus, 2017; Couch, 2000; Drabek, 1986; Ekstrom, Kverndokk, 2015; Krüger et al., 2015; Kulatunga, 2010; Mauch, Pfister, 2009; Perry, 2007; Quarantelli, 1998); Parrado, 2018; Pidgeon, 2002; Refslund et al., 2015; Schipper, Dekens, 2009; Scott, 2007; Tsai, Jiin-Song, Cheryl 2012; Tzaneva et al., 2012; Webb et al., 2000, 2007; Wenger, Weller, 1973).

Over time, mankind has gone through many disasters, from which it has learned, more or less, but lived experiences have led to the formation of a fund of knowledge, attitudes, and behaviors related to the dramatic situations produced. Some societies live permanently with the threat of disasters (seismic and volcanic regions, regions with tropical cyclones and tornadoes, poor regions, etc.) so that the population has a specific consciousness, induced by those events.

In the case of the Covid-19 pandemic, a biological disaster affecting the human body, the role of the cultural factor proved to be overwhelming, both in the medical field and in the social, economic, and political field, a fact highlighted by numerous specialized works, which have analyzed several aspects, such as:

- the role of social distancing to avoid infection (Huynh, 2020);
- the role of culture and government involvement in combating the pandemic (Lagman et al., 2021);

- the impact of national culture and government policies on social distance in the fight against COVID-19 (Wang, 2021);
- xenophobia and its global impact, especially on people of Asian descent, amid the global COVID-19 pandemic and intercultural communication on public health issues (Noel, 2020);
- the role of the cultural factor in increasing the vulnerability to Covid-19 (Tubadji et al. 2020);
- the issue of pandemic security culture (Bjelajac, Filipovic, 2020);
- institutional and cultural determinants of the speed of government responses during the COVID-19 pandemic (Cheng et al. 2021);
- the impact of globalization and consumerism on the pandemic (Maboloc, 2020);
- response and perception of the COVID-19 pandemic based on the weekly Eurobarometer reports (Gruchola, Sławek-Czochra, 2021);
- the role of cultural orientations in the population's response to the pandemic (Velamoor, Persad, 2020);
- the effect of national culture on stock market responses to a global health disaster (Fernandez-Perez et al., 2020);
- etc.

Culture is a characteristic of human society and involves several definitions, such as:

- all material and spiritual values created by mankind, and the institutions necessary for the communication of these values (dexonline.ro);
- a series of common patterns of behavior and cognitive construction, which shape the way people perceive, think, and act in their social world (Heine, 2010);
- the set of attitudes, values, goals, and common practices that characterize an institution or organization (Merriam Webster Dictionary);
- the way of life, especially the general habits and beliefs, of a certain group of people at a certain time (Cambridge Dictionary).

Therefore, a few keywords can be retained: material and spiritual values, attitudes, goals, and behaviors, which can be individual and collective. In the case of the Covid-19 pandemic, each individual took his fate into his own hands and began to accumulate values, attitudes and behaviors related to the evolution of events, amid an avalanche of information coming from the authorities and the media.

The hesitations of the medical and governmental authorities-led, from the first months, to the installation of a feeling of insecurity, distrust, and suspicion, and the world's population reacted with a certain response, depending on local, regional, and national cultural characteristics, to all the challenges that followed by the restrictions imposed by the authorities, the suggested sanitary measures, the accuracy of the medical protocol in hospitals, the reality of the reports (infected, deceased), vaccination, etc.

Disasters cause material damage and human casualties, but at the same time generate impetus for crisis management, reinventing society, and returning to normalcy. There is an increase in personal responsibility and the desire for social involvement, to overcome crises situations and restore society as soon as possible. Spiritually, love for other people and religious beliefs are increasing, volunteerism and humanitarian work are on the rise, and churches are a haven for more and more people (Liu, 2021; Sing-Kiat et al. 2021).

The COVID-19 pandemic has affected all of humanity, and the response of communities to an unprecedented health crisis in the last hundred years has been diverse and impulsive, based on no previous experience. The authorities have proved to be powerless in communicating and managing the crisis, so each individual has found himself in a position to gather information from various sources and pass it through his own filter to understand what it is all about, how to protect and how to survive. The population of Bistrita city did the same, so that real pandemic folklore appeared, which included beliefs, beliefs, rumors, and speculations, along with scientific information provided by specialists.

## 2.MATERIALS AND METHODS

To carry out this study, several methodological steps were followed, as follows:

-conducting interviews, between March 2020 and November 2021, with several people on issues related to the pandemic, namely: the origin of the virus, the means of spreading the virus, the forms of the disease, the treatment, the atmosphere in hospitals, the role of comorbidities, the content and effects of the vaccine, the position of the authorities towards the pandemic, the role and legality of the restrictions, etc .;

-elaboration of an opinion poll, oriented towards the cultural dimension and the behavior of the inhabitants of Bistrița in connection with the pandemic;

-processing the opinion poll and analyzing the data obtained.

For the formulation of the questionnaire, we took into account the sequence of stages that followed the beginning of the pandemic, and contributed to the psycho-behavioral modeling of the inhabitants of Bistrița, as follows:

A)Formation of the cultural fund among the population:

a)broadcasting the first information about the new coronavirus, on television stations: end of January 2020;

b)the appearance of the first case of illness with the new coronavirus in the country: February 26, 2020;

c)press release of the Ministry of Health, regarding the prohibition of public or private events, in open or closed spaces, with several participants greater than 1000 persons: March 8, 2020;

d)the decree of the COVID-19 Pandemic by the WHO: March 11, 2020;

e)establishing the state of emergency on the territory of Romania (Decree no. 195 of March 16, 2020);

f)registration of the first case of illness with the new coronavirus in Bistrita: March 16, 2020;

g)the evolution of diseases in the country and Bistrița-Năsăud county: February 2020-November 2021;

h)problems related to hospital overload, lack of beds in Intensive Care, lack of drugs, forms of treatment in hospitals, deaths of those infected, the circulation of contradictory information on social media about the origin of the virus, the power of the virus, how the virus spreads, treatment from hospitals, the number of illnesses, poor communication of the authorities;

i)the appearance of Pfizer, Moderna, and Astra Zeneca vaccines: October-November 2020;

j)dissemination of information in the media about the vaccination process of the Romanian population: December 2020;

k)arrival of the first doses of vaccine in Romania: December 26, 2020;

l) initiation of the vaccination process of the Romanian population: December 27, 2020;

m)administration of the first vaccine in Bistrita: December 31, 2020;

n)the dissemination on social media of contradictory information regarding the purpose of vaccination, the content of the vaccine, its short and long term effects, the effectiveness of the vaccine;

B)Formation of personal and collective opinions on the pandemic, with all its medical and social aspects, which are in the area of speculation and distrust in the medical act and in the management of the pandemic.

These personal and collective opinions were gathered from the media and through discussions with many people in the city of Bistrita, between March 2020 and November 2021. Based on them, the structure of the survey was outlined, illustrating the cultural level of perception of the pandemic by the population of the city of Bistrita, and to confirm the main disturbances of the community in connection with this extreme medical situation, in the mentioned time interval.

Therefore, the survey sections covered the following components: virus, COVID-19 disease, pandemic, vaccine, authorities, and protection measures. In these sections, a series of pre-constructed questions were asked. These answers were determined based on the folklore circulating in the city, and the respondents only had to choose one or more answers to confirm this folklore about the pandemic.

The survey was attended by 1000 respondents, chosen at random, and the survey was disseminated through social networks (Facebook, Whatsapp) and email.

### 3.STUDY AREA

Bistrița municipality is the residence of Bistrița-Năsăud county (Romania) and has a population of 93,820 inhabitants (Figure 1). It is a second-rank city, founded by Saxon settlers in the 13th century, which stands out today for its agro-industrial, cultural and commercial functions. Although it has two important cities nearby, Cluj-Napoca (rank I) and Târgu Mureș (rank II), the city of Bistrița is a hub between Transylvania, Bucovina, and Maramureș regions, which tends to propel it more and more from the perspective. socio-economic development and make it a pole of regional attraction. No recent events with negative connotations have been recorded in the recent history of the city, and the vulnerabilities that characterize it are insignificant.

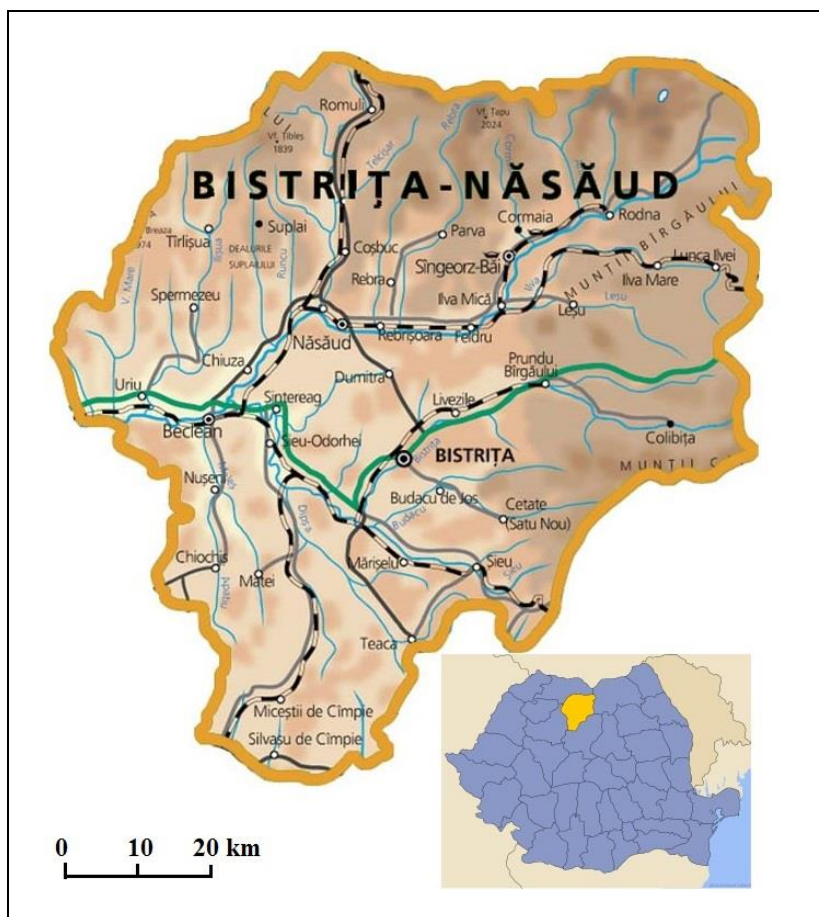


Figure 1-The Geographic position of Bistrița city in Bistrița-Năsăud County (Romania).

#### 4.RESULTS AND DISCUSSIONS

Following the processing of this opinion poll (Tables 1 to 17), it turns out that the population of Bistrita has formed a certain culture in connection with this type of disaster, which folds on the psychological phases of a disaster: pandemic perception, pandemic understanding, pandemic acceptance, coexistence in pandemic and return to normalcy of the community. As such, three cultural subgroups have emerged:

- a) the subgroup of those with reasonable views, following the scientific information provided by the authorities and specialists (the existence and strength of the virus, the existence of the disease, the fairness of the pandemic, the need for vaccination, the importance of the mask and distance);
- b) the subgroup of those with points of view regarding the conspiracy theory (artificial origin of the virus, non-existence of the disease, pandemic manipulation, purpose, inefficiency, and effects of the vaccine, role of the authorities in manipulation, uselessness of protection measures);
- c) the subgroup of those who refrain from answering or have not formulated a point of view.

This situation has many consequences in the community, often conflicting, as follows:

- due to distrust of the medical act, many of those infected do not notify the doctor and are treated at home;
- due to distrust of the vaccine, many people have not been vaccinated, which has sparked heated controversy between vaccinated and unvaccinated;
- the restrictions imposed on the unvaccinated create dissatisfaction, and criticism of the authorities in connection with this discrimination;
- the succession of genetic mutations suffered by the virus and the waves of diseases is perceived as a preliminary scenario, set up by entities unknown to the people.

However, the population of Bistrița is beginning to accept this stage of the pandemic and live with the virus, which shows that it has formed certain cultural baggage in connection with this biological disaster.

##### A. The respondents

Table 1. The respondents 1000 persons

Age		Sex		Education		
years group	%	M	W	gymnasium	high-school	faculty
below 20	9	40	60	3	21	76
20-30	20					
30-40	22					
40-50	27					
50-60	16					
over 60	6					

##### B)About the virus:

Table 2. Do you think the virus exists?

Answers	%
yes, it exists and it is dangerous	78
not available	1
exist, but not dangerous	13
not exist and everything is a staging	1
I don't know	7

Table 3. Do you think the virus is natural or artificial?

Answers	%
is natural	32
is artificial, escaped from the laboratory	19
is artificial, released from the laboratory to reduce the population	20
it is artificial, released by the Chinese to take revenge on the Americans	2
I don't know	27

C)About COVID-19 disease:

Table 4. Do you think the disease exists?

Answers	%
exist and is very serious	63
exist but it is only a simple cold/flu	4
exist, but it's like a stronger flu	27
not exist and everything is a staging	1
exist and was left by God, to punish us	1
I don't know	4

Table 5. How do you explain the deaths due to this disease?

Answers	%
the deceased had other diseases	15
those who died did not receive adequate treatment	5
all those who died in hospitals of other causes were included in Covid-19	75
I can't explain	5

D)About the pandemic:

Table 6. Why do you think the pandemic was declared?

Answers	%
was decreed for real reasons (virus, disease)	63
it was triggered to restrict our movement	2
was decreed to reduce the planet's population	13
was decreed for a human experiment	6
it was decreed that the drug industry would gain	14
was decreed to establish a new world order	13
I don't know	12

E)About the vaccine:

Table 7. Have you been vaccinated?

Answers	%
yes	73
no	17
no answer	10

Table 8. If you got vaccinated, why did you do it?

Answers	%
I got vaccinated for health	47,2
I was vaccinated only to be able to circulate / avoid restrictions	11,1
I was vaccinated for health and to be able to circulate / avoid restrictions	41,7

Table 9. If you were vaccinated, where did you find out about the usefulness of the vaccine?

Answers	%
from the media	25,4
from doctors	50,7
from friends	7
from patients who, being vaccinated, had a mild form of Covid 19	9,9
I was convinced of its usefulness in my general culture	40,8

Table 10. If you have been vaccinated, how do you view the unvaccinated?

Answers	%
in any case, it is their decision	76,8
probably had serious reasons (medical, went through the disease)	2,9
were manipulated	17,4
I was convinced of its usefulness in my general culture	2,9

Table 11. If you have not been vaccinated, what is the cause?

Answers	%
I think the vaccine has no effect	25
I think the vaccine is dangerous for immediate side effects	15
I think the vaccine is dangerous for side effects over time	35
I think the vaccine was created to decimate the population	5
I think the vaccine is experimental and nothing is known about its effects	45
through the vaccine, nanites is introduced into our body to control us	2

Table 12. If you have not been vaccinated, what has led you to oppose the vaccine?

Answers	%
information broadcast on television	31,6
information broadcast on various sites	21
information broadcast on you tube	10,5
information broadcast on Facebook	5,3
information broadcast via whatsapp	10,5
incoherent actions of the authorities	15,8
cases of those vaccinated	57,9
deaths of those vaccinated	31,6
religious beliefs (interpretation of the Bible, advice of priests)	21
refusal of certain doctors to be vaccinated	31,6
rumors coming from hospitals	26,3

Table 13. If you have not been vaccinated, how do you view those who are vaccinated?

Answers	%
they are naives	0
in any case, it is their decision	87,5
probably had reasons	4,2
did not know what they were doing	4,2
were manipulated	0
did to avoid restrictions	25

Table 14. What do you think about the vaccination certificate?

Answers	%
is a motivation for vaccination	30,3
not necessary, because it discriminates against us	5,7
it was invented to force us to get vaccinated	63
is a means of destabilizing the economy	1



F)About the authorities:

Table 15. In terms of pandemic management, do you trust the authorities?

Answers	%
yes	39
no, because the authorities manipulate us	6
no, because the authorities lie to us and serve the occult world	4
no, because the authorities do not know how to communicate with the population	28
no, because the data are contradictory	23

G)About protection against the virus

Table 16. What do you think about the mask?

Answers	%
is very important for protection against the virus	63
I don't think it's too important for protection against the virus	21
does not provide any protection	9
contains particles that cause lung cancer	1
has the role of making us uniform	2
it is not good because it lowers the level of oxygen in the blood	11
it's not good because you get heart disease	0
it's not good because you're tired of it	5

Table 17. What do you think about distancing?

Answers	%
is indicated, in order not to contact the virus	70
it doesn't matter, because you can still get the virus	23
it was set up to keep us away from each other	7
it was set up to manipulate us	7

## 5.FINAL CONSIDERATIONS

The opinion poll shows that the population of Bistrita city is aware of all trends in the pandemic, present worldwide, namely: distrust of the authorities, distrust of the medical act, false reports about infected and deceased, speculation about the origin, and the purpose of the virus, distrust of the vaccine and vaccination, the uselessness of the vaccine, and the green certificate, the scenario of the succession of waves and genetic mutations suffered by the virus, etc. This situation is amplifying day by day, as the media still has a lot of contradictory information, including the end of the pandemic, which is estimated to be in the spring of 2022.

## REFERENCES

1. APPLEBY-ARNOLD, S., BROCKDORFF, N., JAKIVJLEV, I., ZDRAVKOVIC, S. Applying cultural values to encourage disaster preparedness: Lessons from a low-hazard country, **International Journal of Disaster Risk Reduction**, Volume 31, Pages 37-44, 2018. Retrieved 20 October 2021.
2. APPLEBY-ARNOLD, S., BROCKDORFF, N., JAKOVJLEV, I., ZDRAVKOVIC, S. Disaster preparedness and cultural factors: a comparative study in Romania and Malta, **Wiley Online Library**, Vol.45, 3, 2020. Retrieved 25 October 2021.

3. BJELAJAC, Z.D., FILIPOVIC, A.M. Lack of security culture in facing the Covid-19 pandemic, **Kultura polisa**, XVII, 42, p. 383-399, 2020. Retrieved 10 January 2022.
4. CHAMLEE-WRIGHT, E. Reflections on Methodology, Disasters, and Social Learning, **Studies in emergent order**, vol. 4, 87-104, 2011. Retrieved 10 November 2021.
5. CHEN, D., PENG, D., RIEGER, M.O., WENG, M. Institutional and cultural determinants of speed of government responses during COVID-19 pandemic. **Humanit Soc Sci Commun**, 8, 171, 2021. Retrieved 10 January 2022.
6. BEMPAH, Sh., A., ØYNUS, A.O. The role of social perception in disaster risk reduction: Beliefs, perception, and attitudes regarding flood disasters in communities along the Volta River, Ghana, **International Journal of Disaster Risk Reduction**, Volume 23, 2017. Retrieved 12 November 2021.
7. BUTOVSKAYA, M.L., BURKOVA, V.N., RANDALL, A.K., DONATO, S., FEDENOK, J.N., HOCKER, L., KLINE, K.M., AHMADI, K., ALGHRAIBEH, A.M., ALLAMI, F.B.M., ALPASLAN, F.S., AL-ZU'BI, M.A.A., BICER, D.F., CETINKAYA, H., DAVID, O.A., DURAL, S., ERICKSON, P., ERMAKOV, A.M., ERTUGRUL, B., FAYANKINNU, E.A. Cross-Cultural Perspectives on the Role of Empathy during COVID-19's First Wave, **Sustainability**, 13(13), 7431, 2021. Retrieved 6 January 2022.
8. CIOTTI, M., CICOZZI, M., TERRINONI, A., JIANG, W.C., WANG, C.B., BERNARDINI, S. The COVID-19 pandemic, **Critical Reviews in Clinical Laboratory Sciences**, 57:6, 365-388, 2020. Retrieved 21 December 2021.
9. COUCH, S.R. The Cultural Scene of Disasters: Conceptualizing the Field of Disasters and Popular Culture, **Int. J. Mass Emerg. Disasters**, 18(1): 21-37, 2000. Retrieved 20 October 2021.
10. DANIEL, S.J. Education and the COVID-19 pandemic. **Prospects**, 49, 91–96, 2020. Retrieved 16 December 2021.
11. DHEER, R.J.S., EGRI, C.P., TREVINO, L.J. A cross-cultural exploratory analysis of pandemic growth: The case of COVID-19, **J Int Bus Stud**, 52, 1871–1892, 2021. Retrieved 18 December 2021.
12. DRABEK, T.E. **Human system responses to disaster: An inventory of sociological findings**, New York: Springer-Verlag, 1986, p.509. Retrieved 05.01.2022.
13. EKSTROM, A., KVERNDOKK, K. Introduction: Cultures of disasters, Culture Unbound, vol.7, **Journal of Current Cultural Research**, 356-362, 2015. Retrieved 20 November 2021.
14. FAUCI, A.S., LANE, C., REDFIELD, R.R. Covid-19 — Navigating the Uncharted, **The New England Journal of medicine**, 382:1268-1269, 2020. Retrieved 17 December 2021.
15. FERNANDEZ-PEREZ, A., GILBERT, A., INDRIAWAN, I., NGUYEN, N.H. COVID-19 pandemic and stock market response: A culture effect, **Journal of Behavioral and Experimental Finance**, Volume 29, 100454, 2021. Retrieved 11 January 2022.
16. GRUCHOLA, M., SLAWEK-CZOCHRA, M. The culture of fear of inhabitants of EU countries in their reaction to the COVID-19 pandemic – A study based on the reports of the Eurobarometer, **Safety Science**, Volume 135, 105140, 2021. Retrieved 10 January 2022.
17. HEINE, S. J. Cultural psychology, in: FISLE, S.T., GILBERT, D.T., LINDZEY, G., JONGSMA, A.E. (Ed.). **Handbook of Social Psychology**. Hoboken, NJ: John Wiley and Sons Inc., 1423–1464, 2010, p.118. Retrieved 6 January 2022.
18. HUYNH, T.L.D. Does culture matter social distancing under the COVID-19 pandemic?, **Safety Science**, Volume 130, 104872, 2020. Retrieved 27 December 2021.
19. KRUGER, F., BANKOFF, G., CANNON, T., ORLOWSKI, B., SSHIPPER, E.L. **Cultures and Disasters: Understanding Cultural Framings in Disaster Risk reduction**, Routledge, 2015. Retrieved 22 November 2021.
20. KULATUNGA, U. Impact of Culture towards Disaster Risk Reduction, **International Journal of Strategic Property Management**, 14. 304-313, 2010. Retrieved 24 November 2021.

21. LANGMAN, J.D.N., VERGARA, R.J.D., SARMIENTO, Ph.J.D. Culture as a contributory factor in combatting the Covid-19 pandemic, **Journal of Public Health**, Volume 43, Issue 2, p. e289–e290, 2021. Retrieved 11 January 2022.
22. LAURIE, N., SAVILLE, M., HATCHETT, R., HALTON, J. Developing Covid-19 Vaccines at Pandemic Speed, **The New England Journal of Medicine**, 382:1969-1973, 2020. Retrieved 17 December 2021.
23. LI, Q., GUAN, X., WU, P. Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. **The New England Journal of Medicine**, 382:1199-1207, 2020. Retrieved 10 December 2021.
24. LIU, P.L. COVID-19 information on social media and preventive behaviors: Managing the pandemic through personal responsibility, **Social Science & Medicine**, Volume 277, 113928, 2021. Retrieved 6 January 2022.
25. MABLOC, C.R. Globalization and consumer culture: social costs and political implications of the COVID-19 pandemic, **Eubios Journal of Asian and International Bioethics**, 30 (3):77-79, 2020. Retrieved 12 January 2022.
26. MAUCH, Ch., PFISTER, Ch. (Ed). **Natural disasters, cultural responses. Case study toward Global Environmental History**, Lexington Books, 2009, p.394. Retrieved 25 November 2021.
27. MORENS, D.M., FOLKERS, G.K., FAUCI, A.S. What Is a Pandemic? **The Journal of Infectious Diseases**, Vol. 200, No. 7, pp. 1018-1021, 2009. Retrieved 21 December 2021.
28. NOEL, T.K. Conflating culture with COVID-19: Xenophobic repercussions of a global pandemic, **Social Sciences & Humanities Open**, Volume 2, Issue 1, 100044, 2020. Retrieved 12 January 2022.
29. PARRADO, S. The culture of risk regulation: Responses to environmental disasters, **Regulation&Governance, Wiley Online Library**, vol. 14(3), p. 599-615, 2018. Retrieved 30 November 2021.
30. PERRY, R.W. Defining disaster: an evolving concept. In: RODRIGUEZ, H., DONNER, W., TRAINOR, J.E. (Ed.). **Handbook of Disaster Research. Handbooks of Sociology and Social Research**. Springer, New York, NY, 2007, p.619. Retrieved 05 January 2022.
31. PIDGEON, N. The Limits to Safety? Culture, Politics, Learning, and Man-Made Disasters, **Journal of Contingencies and Crisis Management**, 5, (1), 1-14, 2002. Retrieved 2 December 2021.
32. REFLUND, B., ALBRIS, S., ALBRIS, K. The social life of disasters: an anthropological approach, in DAHLBERG, R., RUBIN, O., VENDELO, M.T. (Ed.). **Disaster Research. Multidisciplinary and International Perspectives**, 1st Edition, Routledge, 2015, p.270. Retrieved 5 December 2021.
33. SCHIPPER, L., DEKENS, J. Understanding the role of culture in determining risk from natural hazards, **IOP Conf. Ser.: Earth Environ. Sci.** 6, 572010, 2009. Retrieved 8 December 2021.
34. SCOTT, J.C. Importance of cultural competency in disaster management, **Centre for Public Service Communications**, 2007. Retrieved 10 December 2021.
35. SING-KIAT, T.R., YUE-YUN, A.Y., MIN-MIN, T., CHEE-KHONG, Y. Cultural Responses to Covid-19 Pandemic: Religions, Illness Perception, and Perceived Stress, **Frontiers in Psychology**, vol. 12, p.2815, 2021. Retrieved 6 January 2022.
36. TSAI, J-S, CHI, C.S.F. Cultural Influence on the Implementation of Incident Command System for Emergency Management of Natural Disasters, **Journal of Homeland Security and Emergency Management**, vol. 9, no. 1, 2012. Retrieved 11 December 2021.
37. TUBADJI, A., WEBBER, D.J., BOY, F. Cultural and economic discrimination by the Great Leveller: The COVID-19 pandemic in the UK, **Covid Economics**, 13, 2020. Retrieved 12 January 2022.
38. TZANEVA, E., SUMEI, F., SCHMITT, E. ed. **Disasters and cultural stereotypes**, Cambridge Scholar Publishing, 2012. Retrieved 15 December 2021.
39. QUARANTELLI, E.L., (Ed.). **What is a disaster? Perspectives on the problem**, Routledge, 1998, p.326. Retrieved 05 January 2022;

40. VELAMOOR, V., PERSAD, E., Covid-19: Cultural perspectives, **Asian Journal of Psychiatry**, Volume 53, 102439, 2020. Retrieved 27 December 2021.
41. WANG, Y., Government policies, national culture and social distancing during the first wave of the COVID-19 pandemic: International evidence, **Safety Science**, Volume 135, 105138, 2021. Retrieved 10 January 2022.
42. WEBB, G.R, WACHTENDORF, T., EYRE, A., Bringing Culture Back In: **Exploring the Cultural Dimensions of Disaster**, **Int. J. Mass Emerg**, 18(1): 5-19, 2000. Retrieved 16 December 2021.
43. WEBB, G.R., The Popular Culture of Disaster: Exploring a New Dimension of Disaster Research. In: RODRIGUEZ, H.A., QUARANTELLI, E.L., DYNES, R.R. (Ed.). **Handbook of Disaster Research, Handbooks of Sociology and Social Research**, Springer, New York, NY, 2007, p.639. Retrieved 17 December 2021.
44. WEN, S.X., The Role of Collectivism–Individualism in Attitudes Toward Compliance and Psychological Responses During the COVID-19 Pandemic, **Frontiers in Psychology**, vol. 12, p.5063, 2021. Retrieved 6 January 2022.
45. WENGER, D.E., WELLER, J. M., Disaster Subcultures: The Cultural Residues of Community Disasters, **University of Delaware Library, Museums and Press**, 1973. Retrieved 21 December 2021.