

Online propaganda as crisis communication during the infodemic: the role of cultural factors

Mi Hoang

Faculty of Public Relations and Communication
University of Economics and Finance, HCMC – UEF
141 – 145 Dien Bien Phu, 15 Ward, Binh Thanh District, HCMC
mih@uef.edu.vn

Abstract—The Covid epidemic is a disaster that happens once every hundred years. Therefore, many problems that the authorities as well as the professionals do not know how to react during this epidemic including the crisis communication. In the early stages, when there was no consensus on how to communicate on the issue of Covid-19 disease, governments had different options for their communication campaigns. This study explores the impact of cultural factors on the choice of government communication campaigns during the pandemic using content analysis and discourse analysis techniques. The results of the study show that in the beginning cultural factors can lead to different choices in government propaganda campaigns on online platforms. However, over time, these campaigns gradually became similar, although cultural differences persisted.

Index Terms—culture, Covid-19, government communication, individualism/collectivism, power distance.

I. INTRODUCTION

Covid-19 pandemic is one of the global problems which impacts all countries all around the world. As this is a new virus to humanity, there was no standardization in dealing with it. Some countries chose the strict reaction with face-mask mandatory and lockdown the whole city, some other countries chose the non-interfering methods and left the decision to individuals. For example, for those who have close contact with a Covid patient, nations in the East such as China and VN required mandatory quarantine at a public center or a hotel while many countries in the West recommended self-quarantine at home.

Many observations pointed out the pattern “West versus East”

cultural difference between the responses of various countries, especially in the early stage of this pandemic, when this disease is an unknown risk. Marion, Tobias and Yong-Yueh (2018) [1] stated the way different governments in different areas responses to uncertainty risk of Covid-19 reflected their own cultural characteristics. For instance, these authors said that the swift and widespread actions of the Taiwan government and people is a sign of the high level of institutional collectivism in that country while the individualism in Sweden makes this country choose a softer approach. When examining the response of the VN government, Kris, Sarah & Azad (2021) [2] explained the success of this country in controlling the pandemic so far is due to the “whole country” approach, when everyone worked together to fight Covid-19. In the study of Moon and Sánchez-Rodríguez (2021), the Koreans with a higher social hierarchy mindset had more personal acceptability toward govern-

ment policies related to this pandemic than their Spanish counterparts.

This paper aims to understand how culture affects the government’s response regarding communication when dealing with uncertainty, with the comparison of two countries belonging to two cultural divides: Vietnam (VN) represented for the East and the United Kingdom (UK) represented for the West. The results would contribute scholarship on the integration between the relation of pandemic response and culture when dealing with uncertainty risk. Furthermore, this study will inform policy makers about a country’s cultural attributes in building the national image and communication with a global audience.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A. Literature Review

There have been many studies stated these variants in governmental responses are due to the cultural differences between communities (Velamoor & Persad, 2020 [3]; Airhi-henbuwa et al., 2020 [4]; Darwin et al, 2021 [5]; Wang, Bandera & Yan, 2021 [6]). For example, Velamoor & Persad, (2020) suggested that countries with a strong political culture of command-and-control governance (Singapore, South Korea, China, Russia, North Korea), tend to use the strategies that apply for all populations, no matter if they like it or not. Meanwhile, in many countries in the West (USA, UK, Canada), with the cultural emphasis on individualism, the protective measures are more flexible, which can apply for citizens from diverse backgrounds. Atalay & Solmazer (2021) [7] pointed out that countries like the Netherlands, Sweden, and the UK with the culture of having high trust in individuals, had issued the social distancing regulations replying on the voluntary of their citizens while countries with the culture of having lower trust in the willingness of their citizens, such as Italy, Spain, and France had more strict strategies, which somewhat forced the people restrict their mobility. Meanwhile, the governmental responses in Germany were consistent and calculated, showing the high uncertainty avoidance culture of this country and the response of Sweden (Marion, Tobias and Yong-Yueh, 2018). Another author, Verma (2020) [8] also drew the relevance between the Chinese government’s support for other countries in Covid-19 after receiving the help from others with the tradition of repaying the kindness here.

Culture matters not only the institutional and individual response to a pandemic, but also the outcomes. Wang, Ban-

dera & Yan (2021) found the statistical relation between Individualism vs Collectivism (IDV) and death rate. The countries with higher IDV had higher regional mortality rate, which suggests the contribution of the “freedom” mindset but only focused on their own health, not of the others. Besides that, Gelfand et al (2020) stated the growth rates of COVID-19 is considerably slower in the countries with high collectivism (eg. Hong Kong, Taiwan, and South Korea). Other studies (Biddlestone, Green and Douglas, 2020 [9]; Im, Wang, Chen, 2021 [10]; Gokmen, Baskici & Ercil, 2021 [11]) also found vertical individualism has a negative relationship while horizontal collectivism has positive correlation with the willingness to engage in prevention measures of individuals in Covid-19. However, other research also stated that the responsible parties for the outcomes of Covid-19 are not just individual features but also the effectiveness of policies and the medical system (Lupu, Maha & Viorică, 2020) [12], national interpersonal distance preferences (Gokmen, Turen, Erdem & Tokmak, 2020) [13], socioeconomic factors, medical, environmental, and influenza-like illness factor (Cao et al, 2020) [14].

Regarding culture, although there is no unique frame for culture, (Cecilia, 2020) [15], culture is widely considered as an ecosystem of values, beliefs, and symbols in a community that will affect the behaviour of people of that culture (Peacock, 1981) [16]. Majority of scholars in the field agree that culture consists of three elements: (1) patterns of thought; (2) patterns of behavior and artifacts; (3) skills and knowledge for using these artifacts (Qingxue, 2003) [17]. In which, the culture value, which is defined as “shared conceptions of what is good and desirable in the culture, the cultural ideals” (Schwartz, 2011) [18] were examined in many studies, including those related to Covid-19 as it could help to explain the ways social actors conduct their behaviors. For example, the cultural values used to understand the reasons and effects of imposing various variants of social distancing measures and the expectation on voluntary behavior (Atalay & Solmazer, 2021).

When looking at the cultural patterns, many scholars pointed out the noticeable difference between Western and Eastern cultures, in the cultural values and orientations (Yang et al, 2019 [19]; Thomas et al, 2019 [20]; Jia & Krettenauer, 2017 [21]). With the note that these difference is base on the major views shared by the most influential group of people, (Qingxue, 2003) stated 4 main differences between two cultural patterns: (1) High-context Versus Low-context Communication; (2) Individualism Versus Collectivism; (3) Equality Versus Hierarchy; (4) Assertiveness Versus Interpersonal Harmony. Another distinction is Hofstede's model which divides culture into 6 different dimensions: individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity, long term orientation and indulgence. It can be seen that there are two similar characteristics between two approaches, including Individualism Versus Collectivism and Equality Versus Hierarchy. In their article, Marion, Tobias and Yong-Yueh (2018) suggested that the distinction in strategies of different nations could lie in the cultural values of them. For example, the influence of Confucianism in the East Asian countries makes the government tend to rely on hierarchy and thus citizens

have more acceptance from the citizens for the protective measures while the individualism in the West encourages a different approach.

Meanwhile, there are many studies pointing out the importance of media and communications in the pandemic. Anwar, Malik, Raees, & Anwar (2020) [22] argues that the media is the main source of getting information about Covid-19 for the citizens of many countries. It also helped the Center For Disease Control And Prevention (CDC) and the World Health Organization (WHO) provided quickly and widespread information for public health. Yan, Tang, Gabriele & Wu, (2016) [23] also the correlation between the media reports and behavior changes toward the 2009 A/H1N1 influenza epidemic in China. The UK COVID-19 news and information project [24] found out that the UK public, who are well-informed about COVID-19 tend to follow government guidelines and take precautionary measures if needed. These studies also stated that the miscommunication also brings negative consequences on citizens such as fear, psychological stress and anxiety. In which, government communication is considered as important lessons as it would help the nations deal with uncertainty risk and health communication in the future. The role of government communication has been examined in various countries, such as the United Arab Emirates (Radwan & Mousa, 2020) [25]; United States (Kim & Kreps, 2020) [26]; UK (Karen, 2020) [27]; VN (Kris, Sarah & Azad, 2021).

As Covid-19 is a global pandemic, there has been many published articles investigated different factors influence the institutional reactions to this unknown disease (Gokmen, Baskici & Ercil, 2021; Kapoor & Tagat, 2021 [28]; Marion, Tobias and Yong-Yueh, 2018). However, most of these studies focus on the policies and lack of articles comparing the difference of governmental communication about Covid-19 through the lens of culture, although mass media and communication have significant impacts on the behaviour of people in a country. There has been no studies comparing the Eastern–Western cultural differences reflected on two different approaches by government communication over time. To fill that gaps in literature review, this article aims to seek the answer for two research question

Research question 1: How the government communication of these East and West cultures have changed over the time?

Research question 2: How do those differences in cultural values affect the government communication about the SARS-CoV-2 virus?

To answer the research question 2, there are a couple of hypotheses developed as below

B. Hypothesis development

Although there are many characteristics of a national culture, this study will focus on two only: Individualism Versus Collectivism (IND and COL) and Equality Versus Hierarchy (power distance). The reasons, first of all, IND and COL are considered as the key cultural characteristics that explain the difference of different cultures (Triandis, 2001) [29]. Secondly, this cultural dimension also helps to explain why some governments use the strict preventive measures to protect the big population and why some other nations use the

mild methods to protect the rights of their individual citizens. The reason for using the power distance affects the decision to use technological solutions intervention for tracing, tracking and monitoring in Covid-19 (TSI), (Gupta, Shoja & Mikalef, 2021) [30]. The TSI could be considered as an important factor in the governmental responses to this pandemic.

Previous studies (Qingxue, 2003); Marion, Tobias and Yong- Yueh, 2018; Velamoor & Persad, 2020) explained that the difference between two cultural value with Eastern culture has a high level of institutional collectivism, while the Western culture has a high level of individualism, lead to difference reactions of the institution. Collectivism is defined as the tendency to place the need and interest of a group higher than those of individuals while individualism has the opposite meaning (Trubisky, Ting-Toomey & Lin, 1991) [31]. There are many articles examining the reflection of individualism and collectivism by words on books (Twenge, Campbell, & Gentile, 2012) [32], social media (Pezzuti & Leonhardt, 2020) [33], advertisement (Pineda et al, 2015) [34]. According to a multinational survey (Hofstede-insights, 2021a) [35], UK is considered as a country that highly values individualism with an 89 score in individualism. Meanwhile, according to this company, VN only has a 20 score of individualism, which means this country is highly collectivism (Hofstede-insights, 2021b) [36]. Regarding government communication, it's estimated that the UK would show more individualism and less collectivism than VN. Therefore, there are two hypotheses were developed:

Hypothesis 1a: UK government communication mentioned more individualism words than VN

Hypothesis 1b: UK government communication mentioned less collectivism words than VN

Another difference between the UK and VN is power distance

(PD), which implies the inequality in a society, regarding the distribution of power in society. The country with high PD would have the expectation that citizens will have a more accepting attitude to the institutional actions although the individuals might not have the preference of following these directions. VN scores 70 in the PD dimension, which means that people tend to accept an order from the government (Hofstede-insights, 2021b). Meanwhile, the UK scored only 35 in PD, which means people would not easily accept the orders from higher hierarchy positions. Regarding TSI, COVID-19 has forced authorities to use different strategies to mitigate the COVID-19 such as locking down, social distancing, contact tracing and self-quarantine. These solutions interfered with some part of the daily life of the subjects. For example, the contact tracing would reveal who, where, and when that person had close contact with others. The locking down, social distancing and self-quarantine have limited the movement of people. Therefore, it's expected that countries with high PD experienced little to no resistance from people in doing these TSI and government communication would mention more about them. Meanwhile, countries with low PD would not use the TSI often as they get strong reactions from their citizens. Therefore, there are two hypotheses for the PD of two countries, UK and VN:

Hypothesis 2: VN government communication mentioned more about TSI than UK.

III. METHODOLOGY

For analysing the government communication of VN, the published information related to Covid-19 posted on the English site of VN government portal (<http://chinhphu.vn/portal/page/portal/English>) was collected. The chosen time frame was one year, from April 2020 to April 2021. The English site was chosen for the comparison purpose with the UK site. Besides that, an English-language Vietnamese Government portal is chosen as this study aim to examine the propaganda that Vietnamese government to the international audiences as well as the Vietnamese living abroad.

On the UK counterpart, information in the News and Communication session, with the task Coronavirus (Covid-19) on the official website of the UK government (<https://www.gov.uk/>) were crawled. The time frame is similar to the information on VN government website.

The reason for choosing this time range is because there were three waves of Covid-19 in that time in VN, in which the latter is bigger than the previous one. Regarding to UK, this period also has many important events related to Covid-19 such as the UK Prime Minister Boris Johnson got Covid; The UK passes 100,000 coronavirus deaths.; UK human COVID-19 vaccine trials start; UK Prime Minister Boris Johnson confirms that the UK's easing of lockdown will go ahead as planned on the 12th April.

The tool for getting information is OutWit Hub, which is a tool for extracting information from a Web page. The author created many "scrapers" which define which part of the information on the website should be collected in the code source. After the "scrapers" was tested for effectiveness, it would be used for automatically collecting all the articles published on those websites in the defined time frame.

For data analysing, for answering Hypothesis 1, considering this article analyse written words in English, this study used the list of words developed by Twenge, Campbell, & Gentile, (2012). Base on its uniqueness, the top 10 individualistic words were chosen: "sole", "individual", "personal", "unique", "unique*", "self", "independen*", "oneself", "soloist", "identity". The top 10 collectivism words were chosen: "commun*", "unit*", "team*", "collecti*", "village", "group", "everyone", "family", "share", "union".

For answering Hypothesis 2, words related to TSI, including locking down/lockdown, social distancing/social distance, contact tracing/tracing and self-quarantine are used in analysing articles posted on these websites.

IV. RESULTS

A. Descriptive Statistics

VNese government portal published 1073 articles related to the information about Covid-19. There were three waves of Covid-19 in VN:

(1) 29 July 2020 to 23 August 2020,

(2) 26 January 2021 to 26 February 2021, (3) from 30 April 2021.

It can be seen from the chart that in the beginning, the government issued a lot of information about this pandemic.

However, this number was decreasing over the time and stable at 5-6 articles about this sickness although there was a new wave of vCovid-19. Interest in this topic in government communication over the time. The reason for this phenomenon is suggested as COVID fatigue (a term describing the sense of exhaustion from the audience to be exposed to the information related to this pandemic for too long and too often so that they don't want to hear about it again). Another reason for that decrease is that the coronavirus is not new information after one year and it is replaced by the more updated topics.

B. Statistical Analyse

Meanwhile, the UK government website also revealed a similar pattern with the total number of articles related to coronavirus in April 2020 is 1.5 times higher than in March 2020 and 3 times higher than in April 2020. Although in January 2021, there was a Covid-19 wave in UK, In March, 2020, there were several actions by the UK government to control and suppress the coronavirus (COVID-19) variant, to encourage the citizens to take vaccines, to provide practical sport for disabled children and so on.

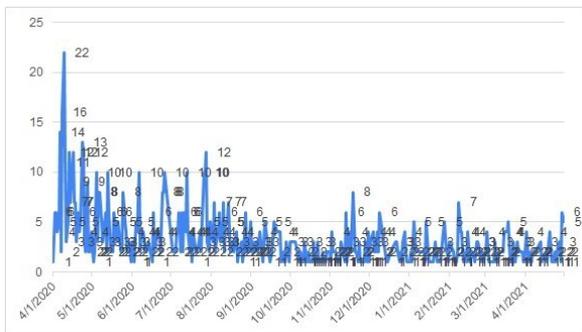


Fig. 1 The articles related to Covid-19 that was published on the VN government portal

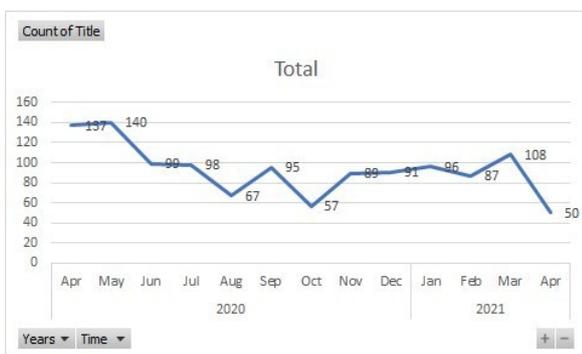


Fig. 2 The articles related to Covid-19 that was published on the UK government portal

The decrease in the number of published information related to Covid-19 on both websites showed that although two countries had two different approaches to Covid-19 in the early stage, the amount of information all decreased although there have been many waves of Covid-19 in both countries in that period of time. Both of the two countries showed the decrease of interest in the information of this sickness over the time. It could be explained as at the beginning of this pandemic, most nations did not know much about this virus so the government needed to provide lots of information about this virus. This finding is similar to the

study of (Pearman et al) [37] on media coverage of COVID-19 of 102 mainstream newspapers in seven regions from Dec 30, 2019 to Nov 1, 2020, which showed the decline in not just the number of published articles.

Therefore, the answer for research question 1 is that in general, both countries in two cultures showed a decreasing.

TABLE I
THE RESULT OF INDEPENDENT SAMPLES TEST OF THE INDIVIDUALISTIC WORDS AND COLLECTIVISM WORDS BETWEEN UK AND VN

	N	Sig.	Sig. (2-tailed)	Mean
Individualistic Words				
VN	1073	.000	.000	0.000932
UK	1265			0.062451
Collectivism words				
VN	1073	.000	.152	0.122088
UK	1265			0.097233

Regarding the reflection of IND and COL, the articles are analysed by computer for the presence of the IND and COL words. For individualism words, they are “sole”, “individual”, “personal”, “unique”, “unique*”, “self”, “independent*”, “oneself”, “soloist”, “identity”. For comparison purposes, the Independent Samples T-Test is used for each total presence of words related to individualism and collectivism in two samples to see if there are statistical differences between them. It can be seen in the analysis that there is a statistical significant difference between Individualistic Words of the articles published on the websites of two governments. In particular, the mean of UK in this variant is higher than in VN, therefore, the articles of UK showed more individualism in this case. Therefore, Hypothesis 1a is supported.

Meanwhile, in the variant Collectivism words, there is no statistical significant difference between UK and VN. Hypothesis 1b is not supported in this case.

TABLE II
THE RESULT OF INDEPENDENT SAMPLES TEST OF THE PD WORDS BETWEEN UK AND VN

	N	Sig.	Sig. (2-tailed)	Mean
Power Distance Words				
VN	1073	.0001576	0.109782	0.4
UK	1265			0.6

It's expected that if Hypothesis 1a is supported then Hypothesis 1b is also supported. However, this finding, the UK government showed the same collectivism words in the government communication with VN. In a previous study of (Jiang & Wei & Zhang, 2021) [39], the authors suggested that although individualism and collectivism's cultural dimension could impact the outcomes of government responses to the coronavirus pandemic, the quality of government works can change the direction. Another possibility is that the UK Government had promoted collectivism to the citizens in later communication (University of Kent, 2020) [40].

Regarding the PD, the articles were analysed for the words: “lock* down”, “social distanc*”, “contact trac*” and “quarantine”. For comparison purposes, the Independent Samples T-Test also is used.

Because $\text{Sig. (2-tailed)} = 0.109782 > 0.05$, therefore, there is no statistically significant difference between UK and VN in this cultural dimension. Therefore, the hypothesis 2 “VN government communication mentioned more about TSI than UK” is not supported.

This result contradicts with the expectation that the country with high PD like VN should mention more about the technological intervention to mitigate the COVID-19. However, this finding is aligned with the statements that VN has been one of the successful countries in controlling this pandemic (Kris, Sarah & Azad, 2021; Pham et al, 2021 [41]). Therefore, this country would use less intervention technologies to force the citizens to limit their mobilities.

V. DISCUSSION AND LIMITATIONS

A. Practical implications

When comparing two countries represented for two different cultural directions, the West and the East, this study found that although these cultures share the same decreasing interest with Covid-19 information over the time, the difference between two cultures is not much different. Although the nation with high individualism such as the UK showed the tendency of caring about individuals, it also moved more in the direction of promoting collectivism to its citizens during the pandemic. The reason for it could be that the collectivism mindset has proven its effectiveness in the early stage of pandemic. Besides that, as the country represented for the Eastern culture, VN, has been quite successful in isolating the coronavirus, it allows the government of this country to mention the same amount of intervention technologies with the country with high PD like UK. This result implies that the governmental responses in Covid-19 are influenced by many other factors, not just cultural values and the directions for the reactions are similar between two differences in culture over the time.

B. Regional hybridity and the impact of globalisation on Vietnam's response to COVID-19

Vietnamese culture combined various values from neighbour countries for many decades. Luong (2016) by his observations, pointed that the cultural hybridity of the postmodern era is rooted in the West's particular historical and cultural trajectories does not work well in the society like Vietnam due to its own historical development. This cultural hybridity lead to the similarities as well as the differences between two countries, representing for the East and the West toward one global health crisis. The unique cultural characteristics of Vietnam can be seen in the slogan in the Covid-19, which is "fighting the epidemic like fighting the enemy", "getting the people as the root".

Second, as Vietnam used the quarantine to control various disease before such as MERS-CoV, A/H5N1 bird flu, it's natural for the government choosing this approach at first rather than living with the virus. Secondly, the Eastern culture value the collectivism, therefore, the well-being of majority is put before the individuals.

The third consideration is the political landscape of Vietnam. As a communist country, Vietnam share the same approach with China, with the emphasis is “the state of Viet-

nam is a state of the people, by the people and for the people”. Going along with this motto is the guidelines and policies in Covid-19 that put people at the center, as the goal and driving force of socio-economic development, demonstrate the superiority of the socialist regime.

C. Limitations

Although this study is a unique attempt to understand government communication in Covid-19 pandemic through a cultural lens, it also has many limitations. First of all, regarding the theoretical aspects, it just examined the difference in two cultural dimensions. Therefore, the effects of other dimensions are unknown and need more investigation. Another limitation is there many other cross-cultural models which could be used in such a study. A wider range of these models are needed for comparison of all the possible aspects of a national culture. Secondly, the data is just collected in one recent year time frame. If the data is collected from the beginning of the pandemic to present, it would provide a more complete picture of the government communication over the time. Besides that, this study focuses only on the news provided by the government while the government communication in the pandemic includes many activities, in various channels. More investigation in other forms of government communication should be conducted in the future to understand the whole landscape of this field. Finally, there is a lack of considering other information communication technologies (ICTs) such as the apps developed by the government or social media. It could be the main source of information about preventive measures for citizens. Exploring the intersection of ICTs and government activities could insight the movement of these information and its impacts on human behaviours.

D. Further directions

This study showed the importance of further cross-cultural research in governmental responses to Covid-19 pandemic, especially the change of these actions over the time and the comparison between different nations in the latter stage of this pandemic to answer the questions such as: How can we see the whole view of the governmental responses to the pandemic? What are the role of other factors in the intersection with cultural values of each country? If the reactions to the pandemic are standardized for all the countries? If we could use the good practice responses in dealing with the unknown risk in the future? The results could contribute to the knowledge for risk communication from the institutional levels.

REFERENCES

- [1] Marion Festing, Tobias Schumacher and Yong-Yueh Lee (2020) National responses to the COVID-19 pandemic – Observations and cultural interpretations. ESCP Impact Paper No. IP2020-81-EN. <https://academ.escpeurope.eu/pub/Chair%20IP2020-81-EN%20FESTING%20ET%20AL2.pdf>
- [2] Kris Hartley, Sarah Bales & Azad Singh Bali (2021) COVID-19 response in a unitary state: emerging lessons from VN, *Policy Design and Practice*, 4:1, 152-168, DOI: 10.1080/25741292.2021.1877923
- [3] Velamoor, Varadaraj & Persad, Emmanuel. (2020). Covid-19: Cultural perspectives. *Asian Journal of Psychiatry*. 53. 102439. 10.1016/j.ajp.2020.102439.
- [4] Airhihenbuwa, Collins & Iwelunmor, Juliet & Munodawafa, Davison & Ford, C.L. & Oni, T. & Charles, Agyemang & Mota, C. &

- Ikuomola, O.B. & Simbayi, Leickness & Fallah, M.P. & Qian, Z. & Makinwa, B. & Niang, Cheikh & Okosun, Ike. (2020). Culture Matters in Communicating the Global Response to COVID-19. *Preventing Chronic Disease*, 17. 10.5888/pcd17.200245.
- [5] James Darwin N Lagman, Raymond John D Vergara, Philip Joseph D Sarmiento (2021), Culture as a contributory factor in combatting the Covid-19 pandemic, *Journal of Public Health*, fdaa280, <https://doi.org/10.1093/pubmed/fdaa280>
- [6] Wang, Jiali & Bandera, Cesar & Yan, Zhipeng. (2021). Culture and Coronavirus Disease Statistics Public Health Through the Lens of Hofstede's Cultural Dimensions, A Multiple Regression Analysis. *10.21203/rs.3.rs-239030/v1*.
- [7] Atalay, S., & Solmazer, G. (2021). The Relationship Between Cultural Value Orientations and the Changes in Mobility During the Covid-19 Pandemic: A National-Level Analysis. *Frontiers in psychology*, 12, 578190. <https://doi.org/10.3389/fpsyg.2021.578190>
- [8] Verma, R. (2020). China's diplomacy and changing the COVID-19 narrative. *International Journal*, 75(2), 248–258. <https://doi.org/10.1177/0020702020930054>
- [9] Biddlestone, M., Green, R. and Douglas, K.M. (2020), Cultural orientation, power, belief in conspiracy theories, and intentions to reduce the spread of COVID-19. *Br. J. Soc. Psychol.*, 59: 663-673. <https://doi.org/10.1111/bjso.12397>
- [10] Im, Hohjin & Wang, Peiyi & Chen, Chuansheng. (2021). The Partisan Mask: Political Orientation, Collectivism, and Religiosity Predict Mask Use During COVID-19. *10.31234/osf.io/9s58f*.
- [11] Gokmen, Y., Baskici, C., & Ercil, Y. (2021). The impact of national culture on the increase of COVID-19: A cross-country analysis of European countries. *International journal of intercultural relations : IJIR*, 81, 1–8. <https://doi.org/10.1016/j.ijintrel.2020.12.006>
- [12] Lupu, D., Maha, L., & Viorică, E. (2020). COVID-19 Incidence in Europe: Drivers and Government Interventions. *Transylvanian ReviewOf Administrative Sciences*, 16(SI), 80-93. doi:<http://dx.doi.org/10.24193/tras.SI2020.5>
- [13] Gokmen, Y., Turen, U., Erdem, H., & Tokmak, İ. (2020). National Preferred Interpersonal Distance Curbs the Spread of COVID-19: A Cross-Country Analysis. *Disaster medicine and public health preparedness*, 1–7. Advance online publication. <https://doi.org/10.1017/dmp.2020.295>
- [14] Cao Z, Tang F, Chen C, Zhang C, Guo Y, Lin R, Huang Z, Teng Y, Xie T, Xu Y, Song Y, Wu F, Dong P, Luo G, Jiang Y, Zou H, Chen Y, Sun L, Shu Y, Du X (2020). Impact of Systematic Factors on the Outbreak Outcomes of the Novel COVID-19 Disease in China: Factor Analysis Study. *J Med Internet Res* 2020;22(11):e23853. doi: 10.2196/23853
- [15] Cecilia Heyes (2020). *Current Biology* volume 30, issue 20, PR1246-R1250 2020 DOI: 10.1016/j.cub.2020.08.086
- [16] Peacock, J. L. (1981). Durkheim and the social anthropology of culture. *Soc. Forces* 59, 996–1008. doi: 10.2307/2577977
- [17] Qingxue, Liu. (2003). Understanding Different Cultural Patterns or Orientations Between East and West. *Investigationes Linguisticae*. 9. 10.14746/il.2003.9.3.
- [18] Schwartz, S. H. (2011). "Values: cultural and individual," in *Fundamental Questions in Cross-Cultural Psychology*, eds F. J. R. van de Vijver, A. Chasiotis, and S. M. Breugelmans (Cambridge, MA: Cambridge University Press), 463–493. doi: 10.1017/CBO9780511974090.019
- [19] Yang, T., Silveira, S., Formuli, A., Paolini, M., Pöppel, E., Sander, T., & Bao, Y. (2019). Aesthetic Experiences Across Cultures: Neural Correlates When Viewing Traditional Eastern or Western Landscape Paintings. *Frontiers in psychology*, 10, 798. <https://doi.org/10.3389/fpsyg.2019.00798>
- [20] Thomas, Andrew & Jonason, Peter & Blackburn, Jesse & Kennair, Leif Edward & Lowe, Rob & Malouff, John & Stewart-Williams, Steve & Sulikowski, Danielle & Li, Norman. (2019). Mate preference priorities in the East and West: A cross-cultural test of the mate preference priority model. *Journal of Personality*. 10.1111/jopy.12514.
- [21] Jia, F., & Krettenauer, T. (2017). Recognizing Moral Identity as a Cultural Construct. *Frontiers in psychology*, 8, 412. <https://doi.org/10.3389/fpsyg.2017.00412>
- [22] Anwar, A., Malik, M., Raees, V., & Anwar, A. (2020). Role of Mass Media and Public Health Communications in the COVID-19 Pandemic. *Cureus*, 12(9), e10453. <https://doi.org/10.7759/cureus.10453>
- [23] Yan, Q., Tang, S., Gabriele, S., & Wu, J. (2016). Media coverage and hospital notifications: Correlation analysis and optimal media impact duration to manage a pandemic. *Journal of theoretical biology*, 390, 1–13. <https://doi.org/10.1016/j.jtbi.2015.11.002>
- [24] The UK COVID-19 news and information project (2020). Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/UK-COVID-19-news-and-information-project>
- [25] Radwan, A. F., & Mousa, S. A. (2020). Government Communication Strategies during Coronavirus Pandemic: United Arab Emirates Lessons. *Journal of Health Management*, 22(4), 516–527. <https://doi.org/10.1177/0972063420983091>
- [26] Kim, D., & Kreps, G. L. (2020). An Analysis of Government Communication in the United States During the COVID-19 Pandemic: Recommendations for Effective Government Health Risk Communication. *World medical & health policy*, 10.1002/wmh3.363. Advance online publication. <https://doi.org/10.1002/wmh3.363>
- [27] Karen B. Sanders (2020) British government communication during the 2020 COVID-19 pandemic: learning from high reliability organizations, *Church, Communication and Culture*, 5:3, 356-377, DOI: 10.1080/23753234.2020.1824582
- [28] Kapoor, H., & Tagat, A. (2021). Worry much? Preventive health behaviours related to worry across countries amid COVID-19. *Journal of Health Psychology*. <https://doi.org/10.1177/1359105321999090>
- [29] Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality*, 69(6), 907–924. <https://doi.org/10.1111/1467-6494.696169>.
- [30] Gupta, M., Shoja, A., & Mikalef, P. (2021). Toward the understanding of national culture in the success of non-pharmaceutical technological interventions in mitigating COVID-19 pandemic. *Annals of operations research*, 1–18. Advance online publication. <https://doi.org/10.1007/s10479-021-03962-z>
- [31] Trubisky, P., Ting-Toomey, S., & Lin, S. (1991). The influence of individualism-collectivism and self-monitoring on conflict styles. *International Journal of Intercultural Relations*, 15, 65-84.
- [32] Twenge, J. M., Campbell, W. K., & Gentile, B. (2012). Increases in individualistic words and phrases in American books, 1960-2008. *PLoS one*, 7(7), e40181. <https://doi.org/10.1371/journal.pone.0040181>
- [33] Pezzuti, T., & Leonhardt, J. M. (2020). How collectivistic values affect online word-of-mouth. *International Journal of Market Research*. <https://doi.org/10.1177/1470785320929200>
- [34] Pineda, A., Hernández-Santaolalla, V., & Rubio-Hernández, M. del M. (2015). Individualism in Western advertising: A comparative study of Spanish and US newspaper advertisements. *European Journal of Communication*, 30(4), 437–453. <https://doi.org/10.1177/0267323115586722>
- [35] Hofstede-insights. (2021a). UK. <https://www.hofstede-insights.com/country/the-uk/>
- [36] Hofstede-insights. (2021b). VN. <https://www.hofstede-insights.com/country/VN/>
- [37] Pearman, O., Boykoff, M., Osborne-Gowey, J., Aoyagi, M., Ballantyne, A. G., Chandler, P., Daly, M., Doi, K., Fernández-Reyes, R., Jiménez-Gómez, I., Nacu-Schmidt, A., McAllister, L., McNatt, M., Mocatta, G., Petersen, L. K., Simonsen, A. H., & Ytterstad, A. (2021). COVID-19 media coverage decreasing despite deepening crisis. *The Lancet. Planetary health*, 5(1), e6–e7. [https://doi.org/10.1016/S2542-5196\(20\)30303-X](https://doi.org/10.1016/S2542-5196(20)30303-X)
- [38] JIANG, Shuguang & Wei, Qian & Zhang, Luyao. (2021). Individualism vs. Collectivism and the Early-Stage Transmission of COVID-19.
- [39] University of Kent. (2020, June 29). Collectivism drives efforts to reduce the spread of COVID-19. *ScienceDaily*. Retrieved May 23, 2021 from www.sciencedaily.com/releases/2020/06/200629120140.htm
- [40] Pham, Quang & Stuart, Robyn & Nguyen, Thuong & Luong, Quang & Tran, Quang & Thai, Pham & Phan, Lan & Dang, Tan & Tran, Duong & Do, T. & Mistry, Dina & Klein, Daniel & Abeansuriya, Romesh & Oron, Assaf & Kerr, Cliff. (2021). Estimating and mitigating the risk of COVID-19 epidemic rebound associated with reopening of international borders in VN: a modelling study. *The Lancet Global Health*. 10.1016/S2214-109X(21)00103-0.
- [41] M. Young, *The Technical Writer's Handbook*, Mill Valley, CA: University Science, 1989.
- [42] Luong Van Huy (2016). Cultural Hybridity and Postmodernism: Vietnam and the West. *VNU Journal of Science*, Vol. 32, No. 1S (2016) 61-67

* means any words is accepted