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# CROSS-CULTURAL DIFFERENCES IN RISK PERCEPTION AND RISK COMMUNICATION. A CASE STUDY ON THE COVID-19 OUTBREAK

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Abstract: The aim of this paper is to analyse cultural differences in attitudes towards perceived risk, during public health emergencies. In order for risk communication to be effective and to properly address people's expectations and fears, political, social and economic factors should be taken into consideration. Moreover, since we consider cultural backgrounds to highly influence communication strategies, the main research questions of this paper are: to what extent cultural dimensions, such as high and low uncertainty avoidance or power distance, are visible in risk communication, and how the message is conveyed in cases of public health emergencies.

The focus is on the discourse of state representatives or public institutions, such as ministries of health, in the context of the recent COVID-19 outbreak.

Keywords: risk perception; cultural differences; public health emergencies; COVID-19 outbreak

### 1. INTRODUCTION

Although making an evaluation of the COVID-19 outbreak crisis communication might seem premature at this point, since the crisis is still ongoing and we did not go through all three precrisis, crisis and post-crisis phases, we consider important to analyse the communication practices in certain key moments of the crisis, not just at the end, in order to be able to draw pertinent conclusions on the entire crisis communication. Also, since some of the purposes of this paper are to analyse the uncertainty and the risk awareness conveyed in the messages to the population, we consider this period of multiple unknown factors, such as the climax of the crisis, the medical solutions available, or the social and economic impact, to be opportune for our study.

The methodology of this study consists in analysing public health emergency communication by combining theories in cultural dimensions and risk perception with critical discourse analysis. A starting point of our study is the cultural theory of Mary Douglas and Aaron Wildavsky on risk perception. For the cross-cultural analysis, we made use of the work of Geert Hofstede, one of the most quoted researchers in the domain of intercultural management and communication. We focused mostly on three of the cultural dimensions identified by Hofstede, namely uncertainty

avoidance, power distance and individualism versus collectivism.

The research questions of our study are to what extent these cultural differences are noticeable in the statements of authority figures and websites of public institutions, or if there is a more universal, global approach to risk and crisis communication. In trying to identify to what extent communication is influenced by social and cultural characteristics, we made a comparison between the official websites of Ministries of Health and several statements made by government representatives, in France and the United Kingdom.

## 2. RISK AND CULTURAL DIMENSIONS - THEORETICAL ASPECTS

2.1 Risk, Danger and Crisis. Risk is a term that is widely and frequently used, and, although it generally refers to the likelihood that a negative outcome will occur, the perception regarding that outcome makes it also fairly subjective and polyvalent. According to the cultural theory of risk, which was introduced by anthropologist Mary Douglas in the late '60s and developed by Douglas together with Aaron Wildavsky (1982), risk and danger are culturally driven ideas. It refers to the cultural reasons that make people react in a certain way to a real and perceived danger and how they form judgments in this respect.

Bringing into discussion the notion of risk and how it evolved throughout the time, Douglas states that it became preferable to the one of danger in political discourse as "plain danger does not have the aura of science or afford the pretension of a possible precise calculation" and "risk seems to look forward: it is used to assess the dangers ahead." (Douglas, 1994:25-26). Mary Douglas proposed a framework for cultural comparisons based on two dimensions: grid and group. The grid dimension describes how people take on different roles in a group, the amount of control and forms of stratification the members accept. The group dimension refers to how strongly people are connected together, how strong or weak the bonds between them are (Douglas, 1970/2004:57-71).

On the group/grid scheme, four distinctive values or ways of life emerge: individualism, fatalism, hierarchy and egalitarianism, based on which social life and organizational behaviour are conducted, and, more generally, which represent the reasoning behind the formation of choices and preference. (Douglas, 1978, Douglas and Wildavsky, 1982)

Another aspect that we are going to discuss in relation to risk perception is the lack of direct connection between the likelihood of a danger and the perceived severity of the danger. Logically speaking, the more probable a negative outcome is to occur and the more acute that negative outcome, the more people should perceive it as dangerous and fear it. However, the situation is much more complex. We will use the study of sociologist Franck Furedy, who asserts that "often people's perception of what constitutes danger has little to do with the real likelihood that they will suffer a misfortune from that source" (Furedy, 2006:23, 2006). He explains that one of the reasons why officials and experts fail at properly communicating risk is that attitudes, which cannot be characterized as rational or irrational, are shaped by a variety of influencers that are "part of the prevailing social and cultural climate" (Furedy, 2006: 25).

Furedy notices also some universal tendencies, such as the tendency to be more exposed by the media to the worst case scenario and towards an exaggeration of the scale of the threat, as well as an increased fear of violent crimes, of side-effects, of environmental and health related dangers, such as epidemics and viruses. This "promotion of fear" is doubled by a decline of trust in humanity, which is not necessarily an increase of consciousness of risks, but more an increased suspicion of hidden interests behind a potential unrevealed risk and of powerlessness. (Furedy, 2006: 30-38)

After presenting an anthropological as well as a sociological standpoint on risk perception, we will focus next on a psychological perspective, namely the one of Paul Slovic. Slovic asserts that public attitudes, though less informed that those of experts, are of utmost importance as they mirror legitimate concerns and how much people are willing to accept, which, if not properly taken into account, lead to ineffective risk communication. One of the most important factors in laypeople's risk perceptions and attitudes, as opposed to those of experts, is considered to be the dread factor. The factor dread risk is defined by a "perceived lack of dread, catastrophic potential, consequences and the inequitable distribution of risks and benefits" (Slovic, 2000: 225).

Slovic gives the example of laypeople's opposition to certain technologies, such as nuclear power, to illustrate the discrepancy between the scientific probability of death caused by an incident in this domain and the risk perception associated to it. The benefits of this technology are generally considered to be small and the risk of a potential catastrophic event to be extremely high, in spite of the lack of evidence in that direction, as risk is not quantified as number of fatalities. (Slovic, 2000: 229-231)

Since the case we are going to analyse falls under the category of public health emergencies, the position of the World Health Organization on risk communication cannot be disregarded. Gaya Gamhewage, a senior expert in the World Health Organization - Hazard Management Department, in a 2014 Introduction to Risk Communication, outlined three main tendencies that have influenced the field of risk communication in the 21<sup>st</sup> century, namely the less trust granted to experts and authorities, the shift to on-line sources and social networks as sources of health advice and the increase of citizenship journalism in the detriment of well-sourced new stories of the past (Gamhewage, 2014:1).

Making reference to Slovic's studies on the perception of risk, Gamhewage summarized some of the main factors that increase public outrage in emergency situations. This level of outrage is believed to increase if a hazard:

- Unfamiliar and/or new (like a new disease, radiation, new drug)
- Involuntary (when risks are forced on the public such as in a compulsory immunization programme)
- Affects future generations (causing or being perceived as causing infertility)
- Cannot be seen or otherwise sensed (radiation, germs)

- Catastrophic in consequence (death, disability, major economic or environmental loss)
- Unfair in the distribution of harm and benefits (affects one group like children, or women)
- Potentially fatal (could lead to death) (Gamhewage, 2014:3)

Hence, the COVID-19 pandemic seems to meet all these criteria to determine a high level of public outrage. Since crises are complex phenomena that take many forms, the term is not universally defined, but, for the purpose of this article, we will use the definition given by crisis communication expert Timothy Coombs, who delineates crisis as the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization's performance and generate negative outcomes' (Coombs 2007:2–3). This definition brings forward the perceptual nature of crises and validates the inclusion of socio-cultural factors in the analysis of communication strategies.

2.2 Cultural Dimensions Theory. Since cultural backgrounds highly influence communication strategies, in this sub-section we will make a brief presentation of the cultural dimensions used in the case study. contribution of Geert Hofstede to the domain of intercultural communication is unquestionable and, being one of the most quoted authors of the field, we consider unnecessary to present the context of his studies and to justify the choice of using the cultural dimensions that he identified as guidelines of analysis for the current study (Pop-Flanja, 2015:173-178). The cultural dimensions that we are going to use in our case study are: Power Distance Index, Individualism versus Collectivism and Uncertainty Avoidance Index, and Long-Term versus Short-Term Orientation.

The Power Distance Index (PDI) refers to the manner in which people from a particular culture relate to social inequality, to the interdependencies between the subordinates and the people in a superior position. In high PDI societies, people in a position hierarchical do lower not uncomfortable if their superiors have a bigger degree of control and decision-making power over them, there is a high degree of obedience and respect. In low PDI societies, there is a limited dependency between superiors and subordinates, which make formalities and status have a less prominent importance. (Hofstede, 1996:40-60)

The dimension Individualism versus Collectivism (IDV) deals with the dependence of an individual on the group or groups that s/he

belongs to. In a highly individualistic society, the task is more important than the inter-group relations and the relations between people are more limited. On the other side of the spectrum, in societies with a higher degree of collectivism, the interest of the group prevails, groups are strongly connected, with well-integrated individuals, and there is a strong accent on a participative type of management. (Hofstede, 1996:68-86)

The Uncertainty Avoidance Index (UAI) focuses on the attitude of a society to uncertainty and the manner in which uncertain situations are tackled. In low UAI cultures, people consider that uncertainty is part of their lives and that there is little they can do to influence it. Hence, individuals are more open to risk-taking and to innovation. In high UAI cultures, people strive to control the future, they have a strong need for security and there is a high confidence in specialists and their knowledge. Hofstede points out that avoiding uncertainty is not equivalent to avoiding risk. To support this idea, he gives the example of high road speed limits in high UAI countries, as the priority is to avoid the uncertainty and the stress caused by wasting time and not the risk of accidents to occur (Hofstede, 1996:133-149). This dimension is nevertheless relevant to our study as, even though avoiding uncertainty and avoiding risk are not equivalent concepts, communicating risk is influenced by attitudes towards uncertainty.

### 3. CASE STUDY: A CROSS-CULTURAL RISK COMMUNICATION COMPARISON BETWEEN FRANCE AND THE UK

Even though the COVID-19 outbreak can be considered a crisis situation from perspectives, the increasing number of cases worldwide (Worldometer, 2020) lead us to presume the crisis did not reach its climax. Moreover, crisis and risk are terms that cannot be studied separately, and crisis management can be placed as a continuation of risk management (Lesenciuc, 2008:105-107). Risk communication is proactive, can be included in the pre-crisis phase and, since the messages we are going to analyse are addressed mostly to the people not suffering from, or unaware of having contracted the virus, but being at risk of contracting it, and considering the perception of risk to be more approachable from a cultural point of view, the theoretical background of this paper was mostly related to risk communication.

The above-mentioned Frank Furedi discusses also the COVID-19 outbreak, which he calls a disaster without precedent. The unprecedence does

not consist in the scale of the destruction and losses, but in the manner in which governments, international organisations and communities have responded to it. "All of these responses are influenced by society's broader cultural script on risk and uncertainty", Furedi states, a script characterised by a shift from resilience to vulnerability, the psychologisation of everyday life, a heightened sense of existential insecurity and the need to cultivate courage. (Furedi, 2020)

In order to make a cross-cultural comparison of the risk communication in this context in the case of France and Great Britain, we will analyse the official websites of the Ministries of Health of both countries and several statements of Prime Ministers Édouard Philippe and Boris Johnson, in the interval 14-26 March 2020.

Even though the number of people diagnosed with COVID-19 was higher in France in that interval (Worldometer, 2020), we consider the level of threat to be similar and the difference in the number of cases not to influence cross-cultural aspects of risk communication.

Since the cultural dimensions used as points of reference in the case study are those identified by Geert Hofstede, we consider relevant to present the country comparison scores for France and the United Kingdom:

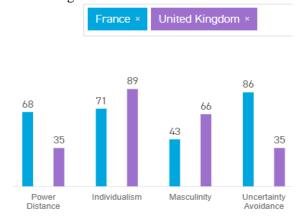


Fig.1 Hofstede Insights, Country Comparison France and the UK (Hofstede *et al.*, 2010).

There is a fairly big difference between the scores obtained for power distance (68 France – 35 UK) and uncertainty avoidance (86 France – 35 UK) and a smaller difference on the scale individualism – collectivism (71 France – 89 UK).

Hence, we will start our analysis with the Power Distance Index. Cultural theory assumes that a culture is "a system of persons holding one another mutually accountable" (Douglas, 1994: 31). This degree of accountability can be interpreted in correlation to the cultural dimension

power distance, as it refers to the extent to which individuals relate to and accept authority. High power distance can be interpreted as more expectation of accountability from the superior. Low power distance can mean placing more accountability on the individual. This is an important aspect that should be taken into consideration when conveying messages to the population. How should the message structured? More in the direction of: to control or limit a negative possible outcome, we, as authorities, are taking these measures and you, the citizens, are expected to take a certain action -as in high power distance societies people do not feel uncomfortable when receiving instructions- or: we, as authorities, recommend you, as citizens, to take a certain action-as a recommendation is more empowering than an expectation.

Also, it is relevant from the same perspective to see to what extent citizens are expected to obey the law, what is their expected degree of obedience. Hence, we analysed the websites of the Ministries of Health of both countries. In the case of France, which scored fairly high on PDI, rules and regulations are clearly presented, but we did not identify any penalties for not obeying the rules. In the case of the UK, information on law enforcement and penalties for not obeying the rules is available repeatedly on the website of the Ministry of Health:

The relevant authorities, including the police, have been given the powers to enforce them – including through fines and dispersing gatherings

or

if the police believe that you have broken these rules – or if you refuse to follow their instructions – a police officer may issue you with a fixed penalty notice for £60 (reduced to £30 if paid within 14 days)

and even stipulations for not complying with the penalties:

For both individuals and companies, if you do not pay, you may also be taken to court, with magistrates able to impose potentially unlimited fines. (UK Government, Department of Health & Social Care, March 2020).

Power distance can also be visible in the level of formality used when addressing citizens, as it illustrates the attention paid to hierarchy and rank. Using the above-mentioned websites, we can observe that on the French website the language

used is, as anticipated, more formal and neutral. For example, information on everyday life, work-related activities or travel is available in the sections Les Mesures Prises Par Le Gouvernement [Measures Taken by the Government] versus Coronavirus outbreak FAQs: what you can and can't do. Moreover, the English website gives detailed answers to questions such as Can I see my friends? or My boss is forcing me to go to work but I'm scared of coronavirus. What should I do? Similar information is offered on the French website in less detailed and more general sections such as Everyday life: Je ne dois pas rendre visite à ma famille et à mes amis [I should not visit my family and friends] and Mon employeur est tenu d'adapter mes conditions de travail pour assurer ma sécurité [My employer is required to adapt my work conditions to my security].(Gouvernement République française - Ministère des Solidarités et de la Santé: UK Government - Department of Health & Social Care March 2020).

As previously stated, we can notice on the country scores chart a fairly big difference between the levels of uncertainty avoidance for the two countries. UAI is believed to influence the level of bureaucracy. High uncertainty-avoidance countries, in trying to minimize the unknown, implement rules and regulations, whilst low uncertainty-avoidance countries feel more comfortable in unstructured situations and tend to be more tolerant of change (Serafeim, 2015).

This difference can also be noticed in the two cases above. As posted on the official website of the Ministry of Solidarity and Health in France, citizens are expected to make a written statement on the reasons for leaving their houses. If the purpose is professional, the employer is also required to fill in a similar statement, declaring that the presence of the employee at the workplace is indispensable. (Gouvernement de la République française, Ministère des Solidarités et de la Santé, March 2020). In the UK, such statements are not required from citizens, even if they are recommended to adopt a certain preventive behaviour and leave their houses for limited purposes.

Next, we will focus on two official statements made by Prime Ministers Édouard Philippe (on 25 March 2020) and Boris Johnson (20 March 2020). Our observations are not based solely on these two statements, but we will make use of them to exemplify our findings. Prime Minister Édouard Philippe gives more detailed information in his statement than his British counterpart, albeit his statement is followed by those of other ministers that present the emergency decree adopted. After

highlighting the prime concern to be for the medical system, he clearly presents the legal measures that have been taken to offer support to businesses, to ensure wages and salaries, to protect the socially vulnerable persons and to optimize public services.

Boris Johnson's statement, one of his most memorable from this interval, provides fewer facts and more rhetoric. Though he reassures citizens that measures are taken, there is more ambiguity on what those exact measures are. Indeed, just as Philippe, Johnson is also accompanied by the chancellor responsible for economic and financial matters, but it is the message of the Prime Minister that is the subject of our analysis. Johnson states:

I set out the ambition of this government to turn the tide against coronavirus within 3 months. [...] We are going to do it with testing. We are going to do it with new medicines, and with new digital technology that will help us to see the disease as it is transmitted, and thereby, by eliminating it, to stamp it out. (UK Government, PM Boris Johnson statement on coronavirus: 20 March 2020)

We can observe in this section elements of persuasion such as involvement, setting a clear goal and a problem-solution type of approach, but no clarification from his part on what is the advancement in the medical or technological fields. Throughout the speech, we also have several examples of empowering words, empathy or appeal to nationalism ("I know how difficult this is, how it seems to go against the freedom-loving instincts of the British people"), but the informative elements are scarce.

Hence, we can observe in these two statements a higher tendency of avoiding uncertainty in communicating risk from the French Prime Minister than from his British counterpart, though both admit the severity of the situation and none of them claim being fully prepared to handle it.

Since similarities have been brought into discussion, we can identify in the two statements other common features such as the reassurance that the institutions are aware of the state of affairs, the presentation of the measures that were taken and the justification for taking those measures, the appeal to nationalism and to solidarity, or the appreciations showed for the efforts made both by public institutions and the citizens in fighting against the pandemic. Another aspect worth examining is to what extent the two officials bring forward a pessimistic or worst-case scenario in their statements. According to the Center for Disease Control and Prevention of the US Department of

Health and Human Services, one of the recommendations given in order to understand how audiences assess messages in a crisis, in case of severe outbreaks, is to avoid playing worst-case scenario. The recommendation is to

stick to the known facts. [...] If the facts are not known, don't fall into the *what ifs*. Instead, describe the steps you are using to get the facts and help the audience deal with the uncertainty while all the facts are uncovered. Speculation weakens credibility and may create needless anxiety(Center for Disease Control and Prevention, 2014: 59).

In the statement of 20 March, Boris Johnson says that: "People whose lives can, must, and will be saved", implying that people are expected to lose their lives, as not all can be saved. An even more fatalistic approach is visible in his statement from 23 March:

Without a huge national effort to halt the growth of this virus, there will come a moment when no health service in the world could possibly cope;[...] To put it simply, if too many people become seriously unwell at one time, the NHS will be unable to handle it - meaning more people are likely to die, not just from Coronavirus but from other illnesses as well. (UK Government, PM Boris Johnson statement on coronavirus: 23 March 2020)

Édouard Philippe is more cautious in making such predictions in his statement, he places more emphasis on the idea of control, and, even though he acknowledges the severity of the situation

C'est évidemment d'abord un choc sanitaire [...] Mais c'est aussi, et ce sera de plus en plus, un choc économique, un choc social. Nous ne sommes qu'au début de la crise... [It is obviously first of all a health shock [...] but it is also, and it will be more and more an economic shock, a social shock. We are only at the beginning of the crisis...] (Gouvernement de la République française, Discours de M. Édouard Philippe: 25 March 2020)

there is no reference to an expected increase in the number of deaths and the word *death* does not appear in the message addressed to the French citizens.

Returning to the analysis of the two websites of French and Health Ministries, it is interesting to observe the recommendation regarding the social distance that should be kept between people: one meter for France versus two meters for the UK. (Gouvernement de la République française - Ministère des Solidarités et de la Santé; UK Government - Department of Health & Social Care

March 2020). Using a universal approach and without taking cultural factors into consideration, we could be tempted to presume that the UK's decision is stricter and more risk-preventive, that this measure was taken in order to prevent even more people from contracting the virus. However, putting these measures into a socio-cultural context, the difference can be explained by how personal, social and public space was understood before the outbreak, in terms of proxemics - the space that people feel comfortable with setting between themselves and others - (Hall, 1966), the individualism-collectivism index explained above or other socio-cultural factors. Since individualism was brought into discussion, except for some isolated instances as the one above or the degree of reluctance towards obeying rules, we did not notice appreciable differences from this perspective between the two official websites and statements.

### 3. CONCLUSIONS

To conclude, we do not claim having been able to take into account the full context that framed the statements of Prime Minister Édouard Philippe and of Prime Minister Boris Johnson, and we do acknowledge that multiple factors, such as political contexts or the personal communication style of each speaker, shaped the speeches in their current form.

Nevertheless, we consider that the objective of identifying in the statements of the two officials and on the websites of the French and British Ministries of Health common communication strategies, as well as indicators of cultural adaptation, was achieved. Hence, in the messages the publics, identified conveyed to we discrepancies in the uncertainty avoidance displayed, in the level of formality bureaucracy, in the expected level of obedience from the citizens, in the perception of social space, and in the approach towards presenting worst-case Our case study confirmed that risk perception and cultural factors are of utmost importance in analysing risk and crisis institutional communication in public health emergency situations, such as the COVID-19 pandemic, as communication in these cases goes far beyond the simple transmission of information to the publics.

As future directions of research, we propose an in-depth comparison between the communication strategies of more culturally diverse countries, as well as an analysis of the manner in which messages were conveyed by supranational institutions, such as the European Commission.

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