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COVID-19 Vaccine Communication Campaigns: A Cross-Country Analysis Based on Hofstede Cultural Dimensions

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Abstract

COVID-19 vaccination campaigns provided a substantial contribution to the management of the pandemic. This paper aims to assess the success of COVID-19 vaccine communication campaigns in different countries, relying on Hofstede's cultural dimension framework. The main objective of the paper is to find out the critical success factors of national communication campaigns. A case study analysis is conducted in a sample of Countries where vaccines are widely available free of charge and national communication campaigns have been used to stimulate citizens' adhesion. Critical success factors of national strategies in terms of adopted media use and media formats, message type, adopted tone of voice and influencers' role are identified and compared to the country's cultural elements. The analysis suggests that the most successful communication campaign strategies, are those where the government and institutions tried to remain coherent and preserve the population cultural traits.

Keywords

Communication Campaign, COVID-19, Vaccination, Cultural Dimensions

1. Introduction, Objectives and Methodology

Vaccination, despite being recognized as one of the most effective primary public health measures, is viewed as unsafe and unnecessary by an increasing number of individuals. Anxiety about vaccines and vaccination programs leading to vaccine hesitancy results from a complex mix of social and political influences, cultural and religious beliefs, the availability of and ability to interpret health and

scientific information, and personal and population experiences of health systems and government policies (Nuwarda et al., 2022). Vaccine hesitancy refers to reluctance or refusal to be vaccinated; which was classified as one of the top 10 threats to public health, worldwide (Scheres & Kuszewski, 2019). It is crucial to develop a proper communication campaign strategy using messages that are specifically framed to reduce this hesitancy (Gursoy, Ekinci, Can, & Murray, 2022).

Even before COVID, culture and religion were studied as influencing decisions on vaccination.

Shelton et al. (2013), Ruijs et al. (2013) and Pelčić et al. (2016) explored whether different religious beliefs are, real exception for vaccination or not finding that if these vaccines serve to protect many more lives they are permitted. Regarding this, vaccination should not be considered opposed to the theological base and values. Following this idea, religion is not in contradiction with vaccination and public health. In general, there is very little religious justification for refusing current vaccine protocols. As a result, these exemptions are frequently used ostensibly for religious reasons by those supporting the current anti-vaccination movements (McDuffie, 2021). Religious objection was shown to be often used by parents as an excuse to avoid the vaccination of their children (Yang & Silverman, 2015; Ruijs et al., 2012).

But it has been also shown how shared cultural constructs embracing the identity of health information crusader, critic, and expert are created by anti-vaccination advocates through online communication (DiRusso & Stansberry, 2022).

Culture, religion and health are closely intertwined, profoundly affecting people's attitudes and behaviors as well as their conception and experience of illness and disease. Moving to vaccines and COVID-19, as concluded by Sisti et al. (2023) in their review, to overcome this pandemic and to be prepared for similar ones in the future, scientists, politicians and health professionals should acknowledge the role that culture and religion play in people's lives and how it can assist in tackling complex health challenges.

The blowout of COVID-19 infectious disease evolved into a pandemic with far-reaching impacts. A study of Anderson et al. (2020) emphasized that the thing that humans could do to stop the COVID-19 outbreak was to change their behaviours. Meanwhile, scientists and health institutions were trying tirelessly to find the vaccine, and the first mass vaccination program started in early December 2020. The vaccine was distributed all over the world and administered by the different health organizations despite doubts and limitations. Even if the vaccine is testified and licensed by WHO to cure COVID-19, people have different understandings and hesitancy (Ashwell, Cullinane, & Croucher, 2022). This is why, to build trust and avoid vaccine hesitancy, effective communication is necessary for the correct implementation of the vaccine policy (Yemer, Desta, & Workie, 2021). Vaccination is a multi-faceted issue which includes benefits and risks to individuals and public.

In this regard, even if COVID-19 represents a global issue, several studies have studied and confirmed that each country developed its response from several points of view (Bal et al., 2020; Greer et al., 2020; Karanikolos & McKee, 2020; Anttiroiko, 2021). Consequently, potential concerns regarding the vaccinations and the stem of the pandemic, may arise from cultural differences and peoples' different perception and viewpoints on COVID-19 disease and vaccines.

This paper evaluates the success of COVID-19 vaccination communication campaigns in a sample of 6 European Countries where vaccines are widely available free of charge and national communication campaigns have been used to stimulate citizens' adhesion. Critical success factors of national strategies in terms of adopted media use and media formats, message type and tone of voice, influencers' role are identified and compared to the country's cultural elements.

To this extent, a case study analysis in France, Germany, Great Britain, Italy, Spain, Sweden was conducted. In order to draw a country profile, the Hofstede's cultural dimension model (Hofstede, 2001) was adopted to examine the possible differences in human behaviours across the considered European Countries.

The Hofstede model (2001) has become the most prevalent model among social scientists evaluating cultural dependencies. Six are the proposed dimensions—with values ranging from 1 to 100—to describe culture as shown in Table 1.

Data on countries' communication strategies were collected from official government public documents, supplemented by information from international databases and local reports, real time data databases and newspaper articles, to identify common patterns as well as significant divergences.

Table 1. Hofstede dimensions.

Power distance—The extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally.

Individualism—The degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "we".

Masculinity—A high score (Masculine) indicates that the society will be driven by competition, achievement and success. A low score (Feminine) means that the dominant values in society are caring for others and quality of life.

Uncertainty avoidance—The way that a society deals with the fact that the future can never be known. The extent to which people feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these.

Long term orientation—How every society has to maintain some links with its own past while dealing with the challenges of the present and future, and societies priorities these two existential goals differently.

Indulgence—The extent to which people try to control their desires and impulses, based on the way they were raised. Relatively weak control is called "Indulgence" and relatively strong control is called "Restraint".

2. Country Profiles

2.1. Country Analysis According with Hofstede's Cultural Dimensions

The model of Hofstede has already been used in the COVID-19 context by Wang, Bandera et al. (2021), to investigate how the different dimensions correlate with infection rate, death rate and recovery rate. This contributes by bridging the gap between culture literature and pandemic research. In our perspective, homogenous clusters of national COVID-19 vaccination campaign strategies are identified, and their effectiveness is assessed based on countries' success in fulfilling the vaccination objectives or evidence of strong citizens' resistance.

According to Hofstede's values of the presented countries (Figure 1), it can be seen that each is particularly forged by one cultural dimension. For instance, Sweden presents high values for "Indulgence", which underlines the fact of being less prone to strict impositions, whereas it is characterized by a more liberal mindset and satisfaction of desires and preferences. Consistently, Sweden shows low values on "Masculinity" which supposes a population that is more focused on living a good life, following their passions and pretending good work-life balance characterized by a caring way of treating others. Coherently with low masculinity, Sweden also reports low scores on "Power distance", again underlining their liberal mindset that fosters social egalitarianism. The United Kingdome major characteristic is high "Individualism". The population is mainly driven by reaching success in the business and job reality, accompanied by high interest and beliefs in strong "masculinity" traits. These latter reinforce the competitive and achievement-oriented mindset. Similarly to Sweden, UK presents low scores on "Power distance", showing the rather open and liberal mindset of the population which dislikes control to be imposed by above. Germany is particularly driven by high "Long term orientation", which specifies a pragmatic way of thinking towards change and progress. The German population is characterized by always questioning factors and circumstances surrounding a societal or technological change and do not take institutional decisions as granted.
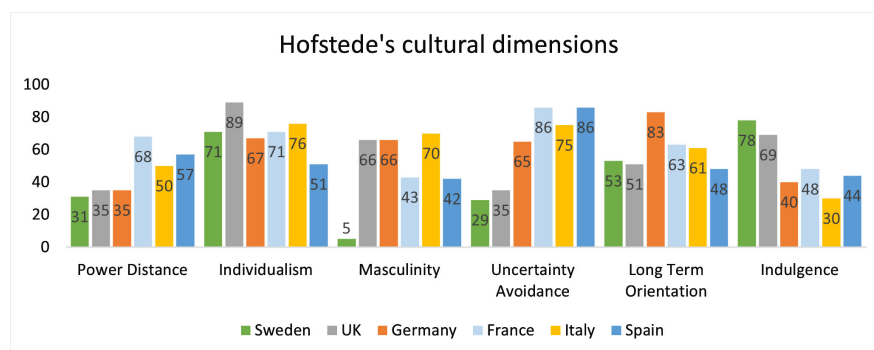

Figure 1. Values of Hofstede's cultural dimensions in the considered countries.

Differently, countries like Italy, France and Spain are all characterized by high scores of "Uncertainty avoidance", which means that they are prone to rely on institutions in times of trouble or uncertainties. On the other hand, these three countries are relatively low on "Indulgence", reflecting a more restrictive way to live their lives and the need of following their instincts.

2.2. Considered Countries' Healthcare Systems

In this paragraph, the healthcare system of each considered country is briefly described to properly understand the implemented vaccination campaigns.

2.2.1. France
The French country implements statutory health insurance (SHI) relying on a centralized governance system wherein delegation to the regions is limited. The national public health institution (Santé Publique) sets national health strategies and leads regional health agencies, as the Communautés Professionnelles Territoriales de Santé (CPTS), to implement their chosen measures (Antonini, Eid, Falkenbach, Rosenbluth, Prieto, Brammli-Greenberg, McMeekin, & Paolucci, 2022; Desson, Weller, McMeekin, & Ammi, 2020). The CPTS, the local health centers, are used to spread confidence and promote the vaccination campaign in a capillary way. The Ministry of Health decides the vaccination strategy by prioritizing the frail and at-risk with three objectives: 1) mortality reduction, 2) health-workers protection and 3) safety guarantee of the vaccine. On the French official government site (https://www.gouvernement.fr/search/site/covid), a dedicated section about COVID-19 is made available. The webpage is updated and monitored on a daily basis with the possibility to directly ask questions regarding the pandemic and vaccination procedures via chat or telephone. Moreover, also dedicated websites related to vaccines general information and booking procedures were institutionalized, as for example "vaccination infoservice.fr". Similarly to other countries, the App "#Tous AntiCovid" was implemented for monitoring and updates at country level. Differently from other countries, in France the usage and download of the App was very popular.

2.2.2. Germany
Germany relied on the national central government that coordinated the national vaccination campaign. Thereby, it defined the strategy to be adopted, the goals to be achieved, and precise guidelines to be followed. In addition, a "Corona-Warn" App was established with the aim of monitoring the health status of each citizen and of identifying possible outbreaks. Given that Germany is a federal state, each "Land" had the individual responsibility to implement the communication campaign. Moreover each "Land" was also responsible to provide the vaccines in their own specific region and to periodically communicate the achieved results at the national government. In Germany there have been two major separate communication campaigns to motivate citizens to the vaccination: 1) "Deutschland krempelt die #Ärmel hoch" (literally: Germany rolls up its

sleeves) launched in December 2020 and 2) "Impfen hilft" (literally: To be vaccinated helps) started in January 2022. The first campaign at the beginning addressed a very specific target focusing especially on elderly and frails and then the vaccination inclusion was extended to the rest of the population. The second campaign, on the contrary was much more interested in increasing the vaccination rate in general, and therefore did not communicate to a specific target, but rather addressed a vast and uneven one. Besides these two centrally proposed campaigns, each Land had vast autonomy and independence in developing further communication, with the only imposition to clearly state which Land is behind each secondary communication or slogan. The Ministry of Health has been a fundamental guidance for citizens during the pandemic, providing all essential and scientific information about the virus and the vaccines on the official website (https://www.bundesgesundheitsministerium.de/). Furthermore, the central national government, together with the Ministry of Health, decided to create an additional official website "Zusammen gegen Corona", where citizens could easily have an overview about the vaccination and cases situation both on national and federal level, as well as important behavior advices on how to behave in case of being infected (https://www.zusammengegencorona.de/). Interestingly, the website was proposed in several different languages beside German and English, like for example Turkish and Arabic. This specific element shows how the national government wanted the official communication channels to be as inclusive as possible, reaching German immigrants as well and assuring that other ethnic groups could be informed as well.

2.2.3. Italy

Since 1979 Italian Healthcare has been managed under a National Health Service scheme, derived from the UK universal coverage model (NHS). The founding principles of the Italian system are the following: public responsibility for citizens' healthcare; universal access to care with equal opportunities for all citizens; full coverage of health needs according to individual status by complying with national quality standards; public funding of providers (both public and contracted entities), with limited out-of-pocket patient contribution for selected services (mainly for containment of inappropriate demand). Although social communication during Covid emergency is managed at the national level, the management of vaccination centers is handled independently at the regional level. This has resulted in substantial differences in the quality of service provided from region to region. Regions independently manage the distribution of doses, administration of the different vaccines, reservations, and even priority age groups. In addition, through the Local Healthcare Units, they manage the distribution of green passes, which is a key element in daily life of people.

2.2.4. Spain

The Spanish Healthcare System is decentralized and managed at a regional level

through 17 Areas de Salud (Autonomous Communities). The central administration is responsible for ensuring that the strategic health plans drawn up by the autonomous communities are consistent with national objectives and priorities (Spanish Government, 2020). Considering vaccination programs in Spain, the Programa y Registro de Vacunaciones was created, with the mission of studying the situation of diseases susceptible to vaccination, as well as the formulation and monitoring of measures aimed at its prevention and control. The vaccination plans are the result of a union of efforts between central governments, government agencies and national research institutes and the governments of the regions (Spanish Government, 2020). Regarding the COVID-19 vaccination campaign, it was carried out both by a national level and a regional one. In general, the communication strategy has applied the following principles (Spanish Government, 2020): 1) veracity: information based on available scientific evidence on the benefits and risks of vaccination; 2) transparency: truthful information provided at all times in a clear and accessible manner that also includes uncertainties; 3) participation: the doubts of the population and health personnel must be heard in order to direct the communication strategy to respond to existing needs; 4) equity: messages are adapted to the audience to ensure that they are accessible. Specific attention given to people with disabilities; 5) evaluation: information periodically re-evaluated. The communication strategy must create a framework of truthfulness, transparency and trust with differentiated objectives for health personnel and the general population.

2.2.5. Sweden

The Swedish National Healthcare Services are both public and private. The public healthcare system is decentralized which means it is managed and provided either by the county council, local authority or municipality. As a result, the type of healthcare services available may vary. Regions were those responsible for carrying out the COVID-19 vaccinations and several institutions had been involved in the Swedish vaccination campaign (Folkhalsomyndigheten, 2020). Four main general features can be identified in the vaccines promotion strategy (Folkhalsomyndigheten, 2020): no obligation to get vaccinated by relying on the responsibility of the individual; clear and simple communication through videos or graphics; the provision of solutions for any kind of problem/reluctance citizens could arise. The involvement of bodies which were already close to citizens to implement a more direct and customizable communication with a particular attention to minorities.

2.2.6. United Kingdom

The NHS stands for the National Health Service. It refers to the Government-funded medical and health care services that everyone living in the UK can use without being asked to pay the full cost of the service. These services include: visiting a doctor or a nurse at a doctor's surgery, getting help and treatment at a hospital if you are unwell or injured, seeing a midwife if you are pregnant, getting urgent help from healthcare professionals working in the ambulance servic-

es if you have serious or life-threatening injuries or health problems—this might include being transported to hospital. People often refer to these health services as "free at the point of use (or delivery)". This means that any UK resident can, for example, go and see a doctor who will offer diagnosis or treatment for an illness without asking the individual to pay for this service during or after the visit. Instead, most health care services are "publicly funded", which means money has been allocated by government to pay for this visit to the doctor. Most of the money is collected through UK residents paying tax. Thanks to the UK's centralized health system, it was easy to identify citizens and priority groups for COVID vaccination and contact them to receive the first dose. At the central level, the government launched a social campaign together with NHS to enable people to share with their friends and relatives about receiving the vaccine and thus strengthen the national vaccination program. Also at the territorial level, different cities in England, Scotland, Wales, and Northern Ireland have mobilized to push people to vaccinate. For example, in England, both large cities such as London, Liverpool, and Manchester, and counties such as Shropshire along with the boroughs of Telford and Wrekin, have mobilized to initiate vaccination campaigns specifically for their areas.

3. Communication Campaigns' Dimensions

In order to classify the COVID communication strategies adopted by the considered countries, the following dimensions of their campaigns were adopted:

- media use and media formats;
- message type and tone of voice;
- influencers' role.

3.1. Media Use and Media Formats

Looking at the public approval of vaccinations, a key determinant is how the media constructs and frames messages about the vaccination itself (Hilton et al., 2010). The media has been considered an important tool for communicating information about vaccines and increasing awareness and motivating the public to make important decisions about their health care (Levitan, 2012). Throughout the pandemic, the public has had massive information needs, both about risk to be infected, how to behave to avoid infection, and about vaccine effectiveness and side effects. Information about the pandemic in any media has been overwhelming (Street Jr. & Finset, 2022). In addition to scientifically grounded and useful information, there were a lot of fake news, rumors and misinformation (Tasnim, Hossain, & Mazumder, 2020).

Traditional media', includes television, radio, newspapers, magazines, medical journals, books, pamphlets, and movies or in other words, any form of mass communication available before the advent of digital media. Traditional media sources still play an important role in the communication landscape (Catalán-Matamoros & Peñafiel-Saiz, 2019; Yemer et al., 2021). Together with traditional
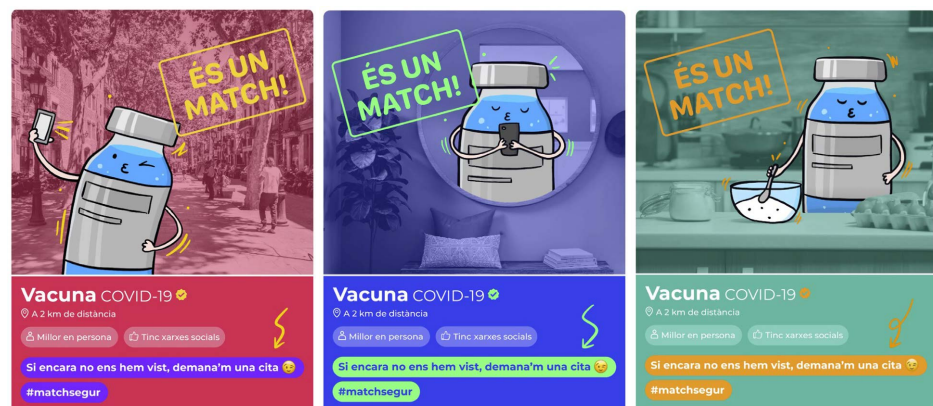
media coverage there is the rapid growth of the Internet and social media (de Vries, Verputten, Preissner, & Kok, 2022) which have made it easier to find and disseminate the vaccination campaigns contents (Ortiz-Sánchez et al., 2020).

An interesting case is the Catalan health department which for the first time ever, used Tinder for an advertisement simulating a profile for the COVID-19 vaccine, calling on the public to access the site vacunacovidsalut.cat to book an appointment: "if we have not met each other yet, do ask me for a date" as shown in Figure 2.

Not to mention the information spread through messaging apps such as WhatsApp, Telegram, etc. (Scott & Mars, 2020). As an example, Figure 3 shows a WhatsApp chat launched by the Spanish government to answer at citizens' questions about vaccines. Social media represent powerful tools for searching and gathering health-related information, thus becoming a new place where health authorities need to be present to disseminate information of preventive measures like vaccines against COVID-19, as well as try to block information against these public health measures (Bennett & Livingston, 2018; Corvo & De Caro, 2020; Herrera-Peco, Jiménez-Gómez, Peña Deudero, Benitez De Gracia, & Ruiz-Núñez, 2021). In the last decade formats as podcasts and social media figure as the most appreciated and consumed format (Barger, Peltier, & Schultz, 2016; Terentyeva & Dzhavrshyan, 2019). Different media formats, including text, images and video, can impact individuals' emotional and behavioral responses in disparate ways (Aylwin, 1981).

The Italian Ministry of Health launched at a national level a video entitled "La Stanza degli abbracci" (The hug room) made by Giuseppe Tornatore (see Figure 4). In a 2 and a half minute dramatic short film an embrace is expected between a mother and daughter in an aseptic space, a hospital room. Thus, social distancing is cancelled out by closeness. A closeness, however, defended by a plastic sheet, which protects against possible contagion.

For instance, authors studied individual differences of how consumers process visual versus verbal information (Childers, Houston, & Heckler, 1985), researched consumers responses to music video commercials' ambiguity and complexity (Hitchon, Duckler, & Thorson, 1994), or explored consumers' different

Figure 2. Tinder used by the Catalan health department.

Figure 3. WhatsApp chat launched by the Spanish government.

Figure 4. "La Stanza degli abbracci" video promoted by the Italian Ministry of Health.

reception of TV commercials, TV news and newspapers (Brians & Wattenberg, 1996). It becomes clear, how during a delicate period, such as the pandemic, the wrong use of media formats, can lead to huge negative outcomes on the society. As we have previously mentioned, individuals' reaction to different stimuli for-

mats may vary substantially and the emotional reactions and behavior may hugely diverge.

3.2. Message Type and Tone of Voice

Studies suggest that individuals who receive objective and rational information are more likely to utilize a more systematic approach to process the message as compared to individuals who receive subjective and emotional information (Chi, Denton, & Gursoy, 2021). Messages can be framed either rationally or emotionally. Messages with emotional appeal, aim to generate positive or negative emotions depending on the message context. Rational messages focus on the rationality of the receiver by presenting information in an objective manner. Looking at COVID-19 vaccination campaign messages, Gursoy, Ekinci et al. (2022) found that rational appeal messages led to higher vaccine risk perceptions than emotional storytelling messages demonstrating the effectiveness of emotional appeal messages in reducing the perceived vaccine risk as compared to rational appeal messages. This result is in line with the findings of Koinig (2021), which suggests a higher degree of message empowerment for emotional appeal messages.

Non-verbal and other elements of body language have been extensively studied in social communication and narrative literature (Mehrabian, 2017; Phelan, 2014; Zuckerman, Amidon, Bishop, & Pomerantz, 1982; Zuckerman, Lipets, Koivumaki, & Rosenthal, 1975). The tone of voice, which includes both the acoustic and emotional components, was found fundamental in a variety of communication contingencies. For instance, studies related to physician and patient relationship have demonstrated how a reassuring tone of voice together with soft mimic facial expressions of doctors can be pivotal in reassuring, and how informative verbal communication only, even if of positive nature, can lead to patients frustration and feeling of being misunderstood and unappreciated patients (Ambady et al., 2002; Friedman, 1979). Moreover, in a world where globalization rides, using the right communication mix of elements can be helpful in maintain positive and fruitful connections with other cultures and countries (Holliday, Hyde, & Kullman, 2021).

The Spanish Ministry of Health focused on a communication that conveyed both the benefits of the vaccine and the risks deriving from lack of vaccination, alternating a reassuring tone of voice with a more shocking one (see Figure 5 and Figure 6). In general, the approach was of mass communication/collective rather than *ad personam*, and both scientific evidences and emotional storytelling have been used in order to facilitate the absorption of the conveyed messages by different audiences.

Instead, in Sweden the slogan promoted at a national level was "together towards better times" presenting the vaccine in a simple way as a tool to return to a normal life by putting an end to the pandemic as shown in Figure 7. The communication was based more on the advantages derived from vaccination than the risks run by those who do not accept to be vaccinated. The narrative

style was based on providing the necessary scientific evidence as a support to a campaign which, however, also includes various emotional stimuli. The tone used was highly reassuring ("the vaccines are safe and effective"), and there was a specific choice of colors such as different shades of blue and aqua green, to convey calm, trust, a sense of stability and security. The general idea of not being alone as citizens but part of a community was transferred from the very beginning as can be found in the reassuring speech of the then Prime Minister on March 22, 2020 who said: "No one is facing this crisis alone, but everyone has a huge responsibility." The choice was to differentiate communication according to population's clusters as for example age groups: parents with children under the age of 12, young people; adults. But also clusters such as (Raffetti, Mondino, & Di Baldassarre, 2022): individuals already infected; pregnant women; linguistic minorities.

Figure 5. Spanish tone of voice (first example).

**Figure 6.** Spanish tone of voice (second example).

Figure 7. Swedish tone of voice example.

The marketing field as well, has been underlining the importance of tone of voice of communication campaigns, which has been demonstrated to be of great impact in achieving different goals or implementing specific strategies (Edinger-Schons, Sipilä, Sen, Mende, & Wieseke, 2018; Osbaldiston & Schott, 2012; White, Habib, & Hardisty, 2019; White & Simpson, 2013). To this end, different approaches such as a positive vs. shocking tone of voice, as well as, more collectivist vs. individualistic claims, or the effects of social influence have been found to be differently useful depending on the desired campaign outcome effects and the topic of the campaign itself (Abrahamse & Steg, 2013; Goldstein, Cialdini, & Griskevicius, 2008; Lee & Oh, 2014; Ryoo, Hyun, & Sung, 2017). In **Figure 8**, a few examples are shown, selected from the considered countries.

3.3. Influencers' Role

Celebrities operate at a powerful symbolic level. To some degree they compensate for social isolation and rootlessness within contemporary urban industrial society; they have become what Schickel refers to as "intimate strangers" (Schickel, 1985). At the same time, the rise of celebrities is associated with the waning significance of ascribed status (associated with royalty and court) and the increased emphasis placed upon achieved status within a meritocracy (Anderson, 2011). For Rojek (2001), the emergence of celebrities is associated with three interconnected historical processes: democratization; the commodification of everyday life (where celebrities become commodities—consumer products to be "bought"); and the decline in organized religion. Broadly speaking scholars have adopted two main positions in relation to how the effects of celebrity involvement in climate change advocacy are perceived; it is seen as either
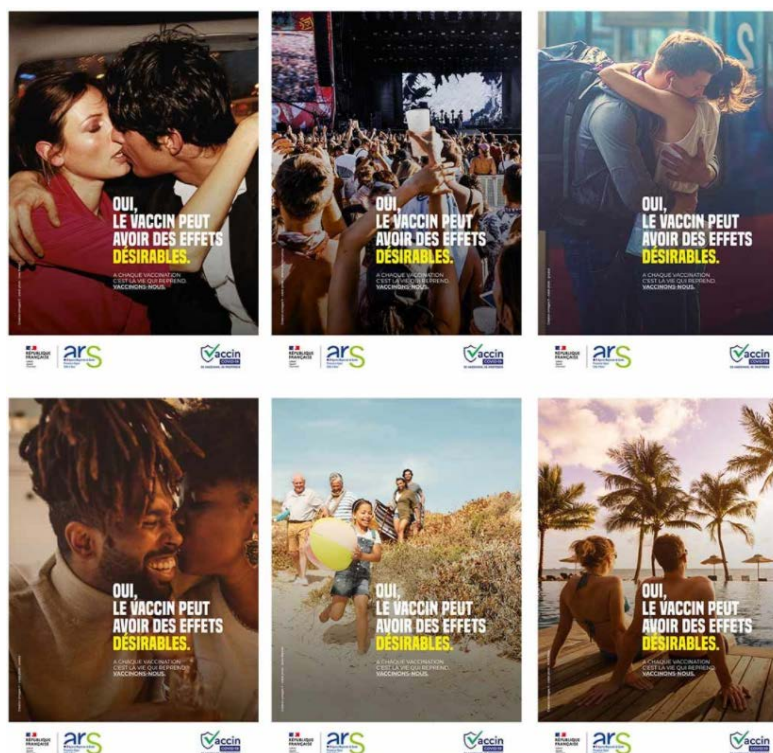
Figure 8. Some examples of tone of voice.

enhancing democracy or constraining democratic politics. For example, Weiskel (2005) argues that celebrity politics is a deception that distracts people from dealing with fundamental issues concerning democracy and social change—part of what he refers to as the "systematic corruption of the American political process". Alternatively, other scholars have argued that celebrity involvement in politics brings increased possibilities for democratic involvement through opening up new spaces for audiences to become engaged with the issues through popular culture. However, there is a tendency with both these views to exaggerate the influence of news media coverage of celebrity advocacy. It is difficult to empirically substantiate that celebrity endorsement of a cause is a prime factor in encouraging or discouraging political activism, though it is often simply assumed to be the case. Previous research shows that celebrity endorsements may result in increased levels of agreement with a political statement (Jackson & Darrow, 2005). Evidence indicates that popular musicians may be able to persuade their fans to take positions similar to theirs, and increasingly, musicians have been offering an image of adolescence that includes adhering to a political or social cause, speaking out about politics (Jackson, 2008). This is very true in the case of pop music stars where the relationship between pop music and politics, varies over time (Jackson & Darrow, 2005). Veer et al. (2010) suggested that musicians are especially likely to influence young people's political attitudes in fact, in his research he shows that low political salience respondents were significantly more likely to vote for the political party when a celebrity endorser was used. Young people's political opinions may be especially susceptible to being

influenced and this is particularly the case where they share similar demographic and ideological characteristics with the stars. In fact, familiarity, likeability, and similarity between the celebrity and the young person is likely to exert a positive effect. So, if political parties are to target those citizens that do not actively engage with politics then the use of celebrity endorsements would make a significant impact. Celebrity endorsements, however, do not automatically translate into wider cultural acceptance of a political message.

In the case of Sweden, as a general strategy, the Ministry of Health decided to involve common people in their spots, with the intention of making a communication as close to citizens as possible (Flodmark, 2020). However also famous people appeared in media and a relevant role was played also by the Royal Family: the King and the Queen got publicly vaccinated and the King made a speech encouraging the population to get vaccinated "so that together and as soon as possible we can get through this difficult time". The same happened in Great Britain where the Royal Family helped to encourage vaccination. The first to vaccinate were Queen Elizabeth and Prince Philip. Then followed by the Dukes of Cambridge when vaccination was opened to their age groups as well. Several times the Dukes have expressed their support for vaccination both through their social channels and through their various visits to vaccination centers (Figure 9).

Figure 9. Swedish and British Royal family member being vaccinated.

Figure 10. Nadal tennis player message and point of view on vaccines.

In some countries such as Spain, rules were introduced at a national level asking government officials not to discuss medical issues, but well known people easily had the chance to publicly express their point of view such as tennis player Nadal as shown in the following Figure 10.

4. Discussion and Conclusions

Looking at the vaccination campaign for the 6 considered countries, Figure 11 shows a summary indicator of the percentage of people who had completed the primary cycle (two doses) at 3/31/2022. Note how the indicator is basically aligned in all the countries until June 2021. This is easily explained since until that date in all countries the campaign was addressed to specific categories of recipients, often obliged to receive the vaccine for professional reasons. Moreover, the first phase inevitably intercepted the categories most likely to be vaccinated. From this point, the curves begin to differentiate and show a better performance of Spain, Italy and France and a progressively reduced effectiveness of Germany, UK and Sweden, evidently having more difficulty in reaching the hesitant components of the population.

In order to understand the reasons of the different campaigns' effectiveness, Hofstede's approach suggests that the success of a vaccination campaign depends on its coherence with the culture of a country. More specifically, the positive outcome of a campaign depends on the institutions' ability to build and execute the campaign in line with the countries' cultural mindset.

For example, the role of the six dimensions can be deepened as follows:

Power Distance: if the country value is high the vaccination campaign seems to be more successful. The country examples show better impact if communication is centralized (France) rather than blended centralized & local (Italy, Spain).
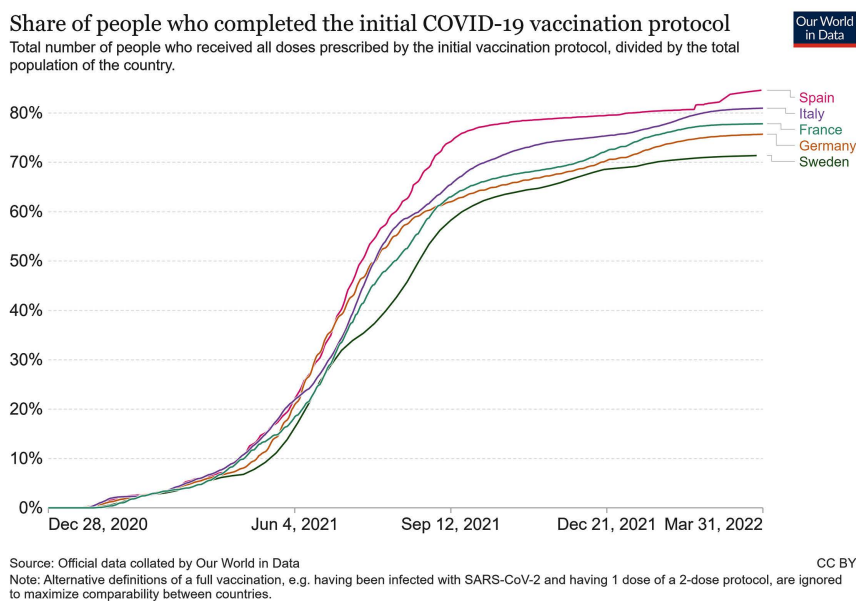
Figure 11. Vaccination campaigns outcomes (Source: One World in Data).

Individualism: if the country value is low ("we" country) a vaccination campaign seems to be more successful when focusing on shared values (Spain). If the country value is high ("I" country) the success of a vaccination campaign requires a communication focused on individual benefits (Italy, France), while if the campaign focus is collective it is less successful (UK).

Masculinity: an average country score (Spain, France) is associated with success of a vaccination campaign. If the country score is very low (Sweden) a vaccination campaign is unsuccessful especially if the communication campaign targets specific clusters/minorities. In Italy where masculinity is high, the vaccination campaign is successful due to a communication which emphasizes the value of vaccines as "individual achievement".

Uncertainty Avoidance: a higher country value is associated with better vaccination campaign results. In countries with low country values, communication should have been more focused on present challenges rather than future benefits.

Long Term Orientation: when societies are more oriented to the past/tradition (low values) communication should be anchored to traditional values (Spain) while societies more oriented to innovation/future (high values), require consistent messages based on innovative principles/future (failure in Germany).

Indulgence: high country values are associated with a poor performance of vaccination campaign especially if the vaccine is communicated as an obligation/restriction (Sweden, UK). If the country values are low the performance of the vaccination campaigns is good with Germany as an exception probably since the communication campaign was ambiguous (a mix of alternating phases: prescriptive or soft tone).

To sum up, social marketing communication campaigns could be properly defined by a deep understanding of countries' cultural dimensions. Evidence collected by this preliminary analysis shows that the unforeseen COVID-19 emergency didn't allow to properly adjust the features of the communication campaigns to country values and this mismatch in many countries probably brought unsatisfactory effectiveness in reaching the hesitating targets.

The vaccination campaigns that had a good effectiveness were those able to modulate the message and better adapt to the different population clusters, through the correct use of media, style and tone. Furthermore, trust in authority was among the main drivers of vaccination adherence.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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