

The Buck Stops Somewhere: An Analysis of Global Governmental Responses to COVID-19

Bryant University Honors Program

Honors Thesis

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ABSTRACT

This study reviews global governmental responses to the COVID-19 pandemic with the goal of identifying determinants of effective interventions. The coronavirus first discovered in 2019, officially known as SARS-CoV-2, sparked radical change in every country across the globe, but as we enter the post-pandemic era, it is clear that some nations fared better than others when it came to addressing the situation. This study makes use of both qualitative research and quantitative analysis to explore the relationships between potential success factors and actual results of the pandemic. Some countries were better prepared to handle a viral outbreak before COVID-19 even began to spread, while others were aided by swift and effective leadership to ensure national success in the face of an international dilemma.

Effective leadership was pivotal in successful responses, as many countries that were seemingly well prepared greatly underperformed pre-pandemic expectations. Factors from the Hofstede Cultural Dimensions such as low individualism, low indulgence, and high power distance all correlated to low relative case counts across this study's countries. Additionally, high trust in government correlated to lower average death counts. The results of this study provide valuable insights for understanding how countries can better respond to future times of crisis.

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INTRODUCTION

While every country was affected greatly by the COVID-19 pandemic, some were able to address the problems the virus created in better ways than others. This study explores some of the best and worst governmental responses to the viral outbreak for the purpose of analyzing critical success factors that influenced the ability of countries to adequately manage the international crisis. In some cases, countries were already well equipped to deal with a national crisis of the scale created by the outbreak of SARS-CoV-2 in late 2019 and early 2020. Success can be attributed to countries' experience with past viral outbreaks such as severe acute respiratory syndrome (SARS) or Middle East respiratory syndrome (MERS). Both successful and unsuccessful responses to past endemics, epidemics, or pandemics allow countries and their governing bodies to learn, change, and progress forward so as to ensure they are better equipped to handle future situations of a similar variety. Some of these countries benefitted from complex technological systems developed on the back of prior viral outbreaks. These systems allowed the governments of these countries to have modernized responses that others could not possibly have. Additionally, some countries found their success by virtue of fostering preexisting societal tendencies reliant on collaboration and sacrifice. Countries made up of citizens who have values that translate better to times of crisis were better suited to solve the complex issues created by COVID-19.

These factors can only set up a country for success to a certain extent, however, as effective leadership in the face of crisis proved to be immensely important. Governments and leaders who reacted swiftly and diligently found greater levels of success while those who ignored and/or perpetuated the rapid spread of the virus found far less success in combating the situation. Populist leaders, who are beloved by citizens when things are going well in their countries, found it difficult to adapt and switch from spreading messages of positivity to telling their constituents the harsh reality of the very situation they were prolonging. Likewise, many government leaders of both democratic and nondemocratic countries who implemented radical change without fear of infringing on citizens' traditional individual freedoms found success. Those who did not successfully lead their countries through the

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pandemic were likely primarily concerned with becoming unfavorable amongst their constituents in the lead up to elections.

This study finds that there was no sole factor that influenced the level of success in responding to COVID-19, but rather a collective set that worked in tandem to produce various responses. Relevant experience, modernized technology, desirable cultural tendencies, institutional trust, and effective government leadership all contributed to better governmental responses to COVID-19. This indicates that although not every country was as well prepared to handle this viral outbreak, all countries and governing bodies can learn from their mistakes and accomplishments, as well as those of other nations, to ensure more successful responses to future times of crises.

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LITERATURE REVIEW

Good Responses

Although the outbreak of COVID-19 affected every country substantially, there were certainly some winners and losers from the global pandemic. Analysis from Park et al. (2020) outlines how South Korea found some of the earliest global success through their IT-based response to the initial outbreak. Rather than deploying drastic measures such as lockdowns or border closures, South Korea made heavy use of contact tracing to keep close tabs on anyone who was thought to be infected and/or was in the presence of an individual who tested positive for the virus. This was made possible through the development of a heavily customized app that drew information from any number of data sources including CCTV footage, immigration records, credit and debit card transactions, public transit history, and cell phone location data, all of which helped ensure that relevant government officials were well informed on South Korean citizens' health and safety.

Ordinarily, such procedures would violate multiple personal privacy laws. However, due to legislation passed in 2015 after the country's experience with the Middle East respiratory syndrome (MERS) outbreak, they were deemed to be legal in order to combat the emergency. Although incredibly invasive and traditionally illegal, there is no denying the effectiveness of South Korea's authoritarian approach to their initial handling of the COVID-19 outbreak.

Not many North American countries had successful responses, but as research from Webster (2020) explains, Canada managed to separate itself greatly from the rest. Similar to South Korea, Canada's relatively positive response to COVID-19 was generated on the back of a prior viral emergency, this being the 2003 epidemic of severe acute respiratory syndrome (SARS). Outside of Asia, no other country was more affected by the SARS outbreak than Canada. This led to the publishing of a report from leading pandemic control experts (in particular, David Naylor) entitled *Learning from SARS* which included multiple recommendations to ensure the country would be better prepared to face similar situations in the future. Although the country has not been able to create a nationwide health monitoring system like South Korea, Naylor believes that Canada's experience with SARS has allowed

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for significant and necessary government change deeply rooted in promoting collaboration. Their leaders have shown how effectively members of a North American government can work together to solve problems instead of politicizing the virus. Most importantly, Canadian leaders learned from SARS that it was imperative to take COVID-19's outbreak very seriously even early on, and this approach to the situation has paid dividends.

The United Arab Emirates is yet another spectacular success story when it comes to handling COVID-19 at effectively every relevant stage of the virus's evolution. Thorough analysis from Al Hosany et al. (2021) outlines each pivotal step the United Arab Emirates took to properly manage the situation. From the outset, the Middle Eastern giant's government showed itself to be ahead of the curve by issuing an alert about the new coronavirus outbreak in combination with the National Crisis and Emergency Management Authority (NCEMA). Shortly after, in March 2020, the United Arab Emirates adopted the mandatory wearing of protective face masks. Both of these precautionary measures were taken prior to the World Health Organization's declaration of an international public health emergency as well as its recommendation of the wearing of face masks. As South Korea and Canada demonstrated, immediate responses to COVID-19 outbreaks were beneficial to ensure countries reacted effectively to the ever-developing situation, and United Arab Emirates leadership proved to be up to the task, early on.

The United Arab Emirates later enacted social distancing policies that doubled WHO recommendations, suspended large public gatherings, suspended all foreign visas and canceled all inbound and outbound flights, and was one of the first countries to switch to remote learning and working. These were all drastic changes to the country's society, but as was the case in South Korea, the United Arab Emirates saw very positive results. Research from the University of Oxford showed that as of May 3, 2022, the United Arab Emirates had incurred 230.41 deaths per million citizens, far fewer than the United States at 2987.98 deaths per million. The United Arab Emirates's serious and authoritarian approach to COVID-19 only continued to ensure it remained as a top example of how to respond to a viral pandemic,

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as research from Holder shows that the country was at one point leading the world in terms of total vaccinations.

The United Arab Emirates was helped in large part by its authoritarian governing style that allowed its government to seamlessly integrate and enforce new, drastic procedures to combat the viral outbreak. However, it is possible that outside of a country's governing style, the very social structures and preferences that define a country influence its government's ability to achieve a successful response to certain times of crisis. Research from Greve et al. (2020) examines the Nordic countries and discusses the importance of cultural values in relation to managing COVID-19. While every country went through significant changes in response to the ever-developing situation as the virus continued to spread and adapt, the Nordic countries were, perhaps, naturally some of the most prepared, due in large part to their pre-existing societal tendencies that prioritize cooperation and sacrifice over individual rights.

It is likely that this social climate made implementing and enforcing protective health measures much easier as compared to countries more deeply rooted in capitalist ideology. Countries like the United States, Brazil, and Mexico chose, and in some ways were forced, to yield to the preservation of individual liberties, while countries like Sweden, Denmark, and Norway were easily able to convince citizens to come together in the face of the crisis. This speaks to the idea that effective leadership as well as beneficial pre-existing societal conditions may be the two most important factors that contribute to a country's success in handling COVID-19 and, perhaps, future times of crisis.

Bad Responses

Although the United Arab Emirates's story is certainly relevant, one authoritarian country's success in handling the virus does not necessarily indicate that all countries that employ this governing style were able to effectively react. This speaks to the possibility that the success or failure of authoritarian countries has less to do with their governing style and more to do with how they use their innate governing power.

Analysis from San (2021) compares how both Turkey and Iran, two authoritarian countries, responded to COVID-19. The study's purpose was to measure non-democratic regimes'

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responses to large-scale emergencies. Both countries took similar approaches in the early stages of the pandemic by downplaying the virus's severity and spreading propaganda that only made future recovery efforts more difficult. Although Turkey is said to have ultimately responded better to the virus than Iran, both countries deserve significant criticism for their poor management of the situation early on. This research indicates that proper leadership is still required from those governing in authoritarian ways, as wielding such a level of power is only useful when leaders act in the interests of their citizens.

Ugly Responses

Some of the worst responses to COVID-19 came from countries that had elected populist leaders. A populist is defined as “a member of a political party claiming to represent the common people,” (Merriam-Webster). Populist leaders are often thought of as inspiring individuals who citizens can trust to work on their behalf—their job is to do what is deemed best not for themselves, but for their constituents. They spread messages of positivity to keep their people happy and feeling proud to be citizens of their country. However, research would indicate that these leaders do not adequately respond when met with a crisis on the scale of the COVID-19 pandemic. As indicated by research from McKee et al. (2020), because populist leaders, by their very nature, are used to spreading messages of positivity to keep their citizens content with their leadership, it is difficult for them to suddenly begin properly recognizing inevitable problems like a rapidly spreading virus. Limiting panic often takes precedence over addressing the problem, but this only made combating COVID-19 even harder for countries with populist leaders.

Aside from considering traditional rationale to speculate as to why or why not populist countries may or may not respond adequately to COVID-19, there is data to support the claim that strongly populist countries gave weaker responses to the virus than other countries. Analysis from Kavakli (2020) found that strongly populist countries implemented fewer protective health measures to slow the initial spread of the virus in February 2020 as well as fewer closing procedures when the situation began to escalate in March. This can be attributed to populist leaders' lack of trust and/or willful ignorance towards advice from high-ranking medical professionals. Through this distrust, populist leaders often use their platform to

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peddle COVID-19 related conspiracy theories. This seems to be a fairly reliable strategy given how research from Stecula and Pickup (2021) revealed just how willing populist citizens are to believe these conspiracy theories. There is a critical error in the process of conveying health information from top officials down to countries' citizens, as medical professionals are simply not trusted enough by common people, making conspiracy theories even more believable when they are denounced by high-ranking health experts.

Populist leaders are able to capitalize on this trend and use it to their benefit in the pursuit of reelection campaigns. Arguably, no leader has downplayed the significance of COVID-19 more than Brazilian President Jair Bolsonaro, who used his populist support to spread harmful messages related to the continuously spreading virus that only worsened the situation. As explained by Smith (2020), President Bolsonaro politicized the virus in the face of a reelection campaign, turning the focus away from public health and, instead, to the potential of a hoax crisis to hurt his campaign efforts. Bolsonaro went on to praise and mingle with quarantine violators instead of cracking down on them, as taking an informed, albeit negative, approach to the virus would stray too far from his usual populist messaging. His actions throughout the pandemic speak to a global populist problem, one that indicates populist governments that are deeply rooted in spreading positive messaging are often not properly equipped to handle times of crisis.

Unclear Responses

It is important to explore how China, the ground zero of COVID-19's global outbreak, has been able to recover from the international crisis. Research from Burki (2020) examines how China, perhaps the most obvious example of an authoritarian country, responded to the spread of COVID-19. By going to extreme lengths to keep people from breaking health protocols, most notably by employing surveillance drones equipped with loudspeakers to publicly ridicule rule breakers, the Chinese government was able to prevent an estimated 1.4 million infections as well as 56,000 deaths. As noted by Goyal and Howlett (2021), several anti-COVID policies that prioritized slowing the spread, border restriction, and information management were implemented, as well. As a result, the country was able to quickly return to a state of relative normality, celebrating this achievement with a large pool party in August

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2020 in Wuhan, the very city COVID-19 originated. While harsh on its people, China's governing style has seemingly proved effective in combating the initial spread of the virus.

While it would be simple to take China's supposed success story at face value, it is important to note that there is often room to question the validity of statistics from authoritarian countries where reputable information is frequently harder to come by. While this does not necessarily mean that all authoritarian countries respond inadequately, research from Kapoor et al. (2020) suggests that data gathered from all countries, particularly ones governed in an authoritarian fashion, must not be taken for granted, as there is potential for these statistics to be manipulated to allow countries to appear more in control than they actually are. The study mentions that stories have emerged regarding the manipulation of COVID-related data in Iran, China, Indonesia, as well as the United States.

While not all of the countries mentioned are non-democratic, the study does focus heavily on authoritarian regimes that often cannot be trusted to tell the whole story regarding situations that will paint them in a negative light on the global stage. This information, in combination with the previous study as well as those related to potentially positive reactions from other authoritarian countries, shows that acknowledging these countries' successes or failures in responding to COVID-19 is not as simple as it may initially seem.

Summary

In evaluating these sources, some conclusions can be drawn about the global responses to COVID-19. Firstly, it is clear that there is no singular factor that influenced the ability of the countries to successfully respond to the viral outbreak. A culmination of past experience with similar situations, modernized technological systems, favorable societal trends and norms, as well as effective government leadership when it mattered most all contributed to the success found in multiple countries.

Secondly, it was difficult for some leaders to properly address the impending spread of COVID-19 in their countries due to their typical populist leadership style. This raises potential questions about certain leadership styles translatability to times of crisis. Finally, there is the potential for data collection processes, particularly in authoritarian countries, to be

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falsified, which allows certain countries to appear to have coped with COVID-19 better than they have in actuality. It is important to remember this when evaluating particularly questionable countries such as China so as to not rush to judgements about governing style or any other relevant viral combative factors.

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RESEARCH QUESTIONS

This study will answer three main research questions in order to assess world leaders' success in handling COVID-19 in their countries, provide critical commentary on certain approaches to handling this international time of crisis, and add to the overall collective understanding of the COVID-19 pandemic.

1. How prepared were the selected countries for the outbreak of COVID-19?
2. What factors allowed some of these countries to react to and contain COVID-19 better than others?
3. How can world leaders of these countries be evaluated for their roles in the COVID-19 pandemic?

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METHODOLOGY

To conduct this study, preliminary research was conducted into various global responses to the COVID-19 pandemic. This helped develop an initial list of countries worth studying further based on what had already been explored. Narrowing the final list down to a small sample of the world allowed for a more concise study of each individual country, as the process of finding consistently available metrics across multiple data sets was made easier.

In order to properly answer the three research questions this study proposed, it was necessary to include data related to multiple different potential aspects of COVID-19 responses. The three main categories identified are as follows:

1. Pre-Pandemic Preparedness
2. Cultural, Governmental, & Societal Tendencies
3. Institutional Trust

Country Selection Process

This study makes use of both qualitative and quantitative research in order to create a global sample of countries and leaders who had to deal with the impact of COVID-19. The following thirteen countries were selected:

- Brazil
- Canada
- China
- Denmark
- Iran
- New Zealand
- Norway

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- South Africa
- Sweden
- Turkey
- The United Arab Emirates
- The United States of America

The majority of these countries were selected for further analysis after they were deemed in preliminary research to have unique, significant, or otherwise noteworthy responses to COVID-19. New Zealand and South Africa were added later in the process as a means of globalizing this study, as the list contains at least one country from each continent, excluding Antarctica. New Zealand's inclusion also allows this study to contain one island nation.

Aside from the geographical differences, there are also significant variations in governing style and social structure. While there are democratic countries such as Canada and the United States, there are also authoritarian countries in China and the United Arab Emirates. The Scandinavian countries inhabit very different social and cultural tendencies than, say, Brazil—just as Brazil is very different, itself, than a country like South Africa. This is intentional, as this study seeks to understand COVID-19's impact on an international level.

Pre-Pandemic Readiness Score

In order to properly assess a country's success in combatting COVID-19, it is necessary to examine how initially capable it was for addressing the outbreak. To do this, a pre-pandemic preparedness score was sourced. It was important to find a reputable and robust database, one that was both published by noteworthy organizations as well as one that included data for all of the selected countries.

The Global Health Security (GHS) Index was selected for this portion of the study due to its ability to adequately meet both standards. Developed by The Economist Intelligence Unit and published by the Nuclear Threat Initiative as well as John Hopkins Bloomberg School of

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Public Health Center for Health Security, the GHS Index serves to benchmark standards for global health. All 195 countries selected for the GHS Index are States Parties to the International Health Regulations, an agreement passed in 2005 dedicated to supporting the detection and reporting of international public health emergencies. The 2019 report of the GHS Index was used to conduct this study, as it was the most recent publication prior to the outbreak of COVID-19.

Seven different data points for each of the thirteen selected countries were pulled from this study. Six of these are sub-scores used to aggregate 140 unique questions into various categories named Prevention, Detection & Reporting, Rapid Response, Health System, Compliance with International Norms, and Risk Environment (these six factors are shortened to Prevention, Early Detection, Rapid Response, Health System, Norms, and Risk in this study). The seventh data point is the overall score, which devolves from the aforementioned sub-scores. Although the overall score is the most important metric, as it is easy for international leaders to reference, the sub-scores provide greater context to each country's level of preparedness. See Appendix B for full rankings for each selected country.

Hofstede Cultural Dimensions

To assess pre-existing cultural factors that may translate to superior pandemic performance, the Geert Hofstede Cultural Dimensions were analyzed. The purpose of these dimensions is to numerically declare cultural preferences across different global states. Each dimension is scored on a scale of 1-100. This study makes use of data published in 2015, as it is the most recently published prior to the outbreak of COVID-19 that also contained data for all of this study's countries. The six dimensions, as well as brief descriptions of each, are as follows:

- **Power Distance**: level of acceptance/expectancy of power inequality
- **Individualism**: level of preference for a loosely-knit social framework
- **Masculinity**: level of preference for achievement, heroism, assertiveness, and material rewards for success

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- **Uncertainty Avoidance**: level of comfort with uncertainty/ambiguity; how much a society attempts to control its future
- **Long Term Orientation**: how much a society promotes change to prepare for the future
- **Indulgence**: how much a society allows for fulfillment of basic and natural human desire to enjoy life and have fun

When examining these dimensions, it is equally important to recognize that some of these dimensions have clearly defined opposites. For example, a country scoring low in Masculinity naturally scores high in Femininity. The opposite of Individualism is Collectivism, and the opposite of Indulgence is Restraint. See Appendix C for full rankings for each selected country.

Institutional Trust Scores

Another potential factor of pandemic performance is institutional trust. For this study, it was relevant to examine each selected country's levels of Trust in Government as well as Trust in Science. For both, the Wellcome Global Monitor's 2020 study was explored via Our World in Data's article titled "Trust" as it was the most recent and most applicable study published containing data for all selected countries, with some anticipated exceptions. The Wellcome Global Monitor is an annual publication by Gallup, and its 2020 issue was dedicated largely to outlining the social impact of COVID-19.

While every country selected for this study presented a Trust in Science score, neither the United Arab Emirates nor China presented a Trust in Government score. Although this detracts somewhat from the findings of these data sets, this is an unfortunate reality of including data from authoritarian countries where it is largely impossible for citizens to vocalize their distrust of their governments. Nevertheless, analysis was conducted with the omission of data points for the United Arab Emirates and China. For full lists of each selected countries' institutional trust scores, see Appendix D.

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COVID-19 Data

To meet the objectives of this study, it was necessary to pull relative COVID-19 data to allow for fair comparison across all the selected countries with vastly differing populations. The three metrics selected for this study were Case Count, Death Count, and Vaccination Count (in-full)—all per 100,000 population. The World Health Organization (WHO) Coronavirus (COVID-19) Dashboard was used to source all three metrics, as it is a reputable and robust database that provides easily accessible data for all of this study's selected countries. The WHO COVID-19 Dashboard updates regularly, meaning the numbers it displays on any given day may not align with those used for this study. The data collection process for this study was conducted in March of 2023. See Appendix E for a full list of each country's COVID-19 data.

Correlation Analysis

The best way to compare all of these separate databases together was using correlations. When using this data analysis tool, responses can be either positive or negative. A positive correlation number indicates that both data sets align, meaning when one data set is high, so is the other. A negative number indicates the opposite, meaning when one data set is high, the other is low. Correlation numbers are held on a scale from -1 to 1, with -1 representing a perfectly negative relationship and 1 representing a perfectly positive relationship. The closer to 0, the less indication of any meaningful relationship between the two data sets. The following correlation analyses were conducted:

- Pre-Pandemic Preparedness Scores to COVID-19 Data
 - Pre-Pandemic Preparedness Score to COVID-19 Cases (per 100,000)
 - Pre-Pandemic Preparedness Score to COVID-19 Deaths (per 100,000)
 - Pre-Pandemic Preparedness Score to COVID-19 Vaccinations (per 100,000)
- Hofstede Cultural Dimensions to COVID-19 Data
 - Hofstede Cultural Dimensions to COVID-19 Cases (per 100,000)

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- Hofstede Cultural Dimensions to COVID-19 Deaths (per 100,000)
- Hofstede Cultural Dimensions to COVID-19 Vaccinations (per 100,000)
- Institutional Trust Scores to COVID-19 Data
 - Institutional Trust Scores to COVID-19 Cases (per 100,000)
 - Institutional Trust Scores to COVID-19 Deaths (per 100,000)
 - Institutional Trust Scores to COVID-19 Vaccinations (per 100,000)

DATA ANALYSIS

Pre-Pandemic Readiness to COVID-19 Data

The GHS Index clearly shows that some countries were theoretically better prepared than others for the COVID-19 pandemic. However, in comparing the GHS rankings to the COVID-19 data, there are clear inconsistencies that throw into question the Index's ability to accurately predict pandemic performance. For instance, the United States ranked number one in the world in terms of global preparedness with a score of 83.5, which means it should have conceivably ranked very low in terms of COVID-19 death rates. Instead, the United States ranks first on this study's list in terms of deaths per 100,000 population and sixteenth globally with a figure of 335.75. Clearly, there is more to explore with regards to the impact of pre-pandemic preparedness. The following graphic displays the results of this study's correlation analysis:

Figure 1

Correlation Results Between Pre-Pandemic Preparedness and COVID-19 Data

	OVERALL SCORE	1. PREVENTION	2. EARLY DETECTION	3. RAPID RESPONSE	4. HEALTH SYSTEM	5. NORMS	6. RISK
Cases (per 100,000)	0.21	0.20	0.21	0.20	0.10	0.13	0.23
Deaths (per 100,000)	0.55	0.60	0.62	0.59	0.47	0.24	-0.02
Vaccinations (per 100,000)	-0.30	-0.18	-0.35	-0.32	-0.38	-0.17	0.06

The results of the correlation analysis between pre-pandemic preparedness and COVID-19 data provide three key observations. The first is a positive correlation between preparedness and death rates, both between the overall score as well as three sub-score categories, those being Prevention, Early Detection, and Rapid Response (although Health System and Norms

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display positive correlations, they are both below 0.5, which makes them too unreliable to draw anything meaningful from). Once again, this is a surprising discovery, as it means that as pre-pandemic readiness scores increased in the selected countries, so did death rates. In essence, the more prepared countries ultimately had less success in managing COVID-19 deaths.

The second observation is a slightly negative correlation between pre-pandemic preparedness and vaccination rates across the overall score and multiple sub-scores. This, too, is a somewhat shocking result, as it shows that higher preparedness seemed to translate to lower vaccination rates.

The third observation is the lack of any meaningful relationship between pre-pandemic preparedness and COVID-19 case rates. Results between -0.5 and 0.5 are considered to be fairly random and do not indicate any strong positive or negative correlation. However, this is still useful information to take away, as it shows that the GHS Index did not accurately predict the ability of the countries to contain the spread of COVID-19. Although, it is also possible that the countries studied had vastly different levels of testing, and some may have reported less than complete statistics due to insufficient facilities.

While both correlation results from deaths and vaccinations are fairly low, barely eclipsing the -0.5/0.5 threshold in some cases, they are stark contrasts to the expected results. This shows that pre-pandemic preparedness scores did not accurately predict pandemic performance, meaning it is necessary to look at other factors.

Hofstede Cultural Dimensions to COVID-19 Data

Geert Hofstede's Cultural Dimension rankings show clear differences in governmental and sociological preferences across the countries this study analyzes. Beyond theoretical pre-pandemic preparedness, it would seem as though some of these pre-existing cultural factors played a part in the ability of the countries to deal with COVID-19. The full results of this section of correlation analysis are as follows:

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Figure 2

Correlation Results Between Hofstede Cultural Dimensions and COVID-19 Data

	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	Long Term Orientation	Indulgence
Cases (per 100,000)	-0.66	0.64	-0.09	-0.47	-0.34	0.66
Deaths (per 100,000)	-0.18	0.27	-0.11	0.07	-0.12	0.29
Vaccinations (per 100,000)	0.06	0.20	0.15	-0.37	-0.51	0.39

As was the case for the previous correlations, there are three key observations worth exploring in detail. While the pre-pandemic preparedness correlations showed death rates to have the strongest relationships, it was case rates for the cultural dimension rankings.

The first main takeaway is a strong negative correlation between cases and Power Distance (PDI). This means that as PDI increased, case rate decreased. A country with a high PDI score contains a society of people who tend to accept their place in the hierarchical power structure, while those in a low-scoring country actively attempt to change their level of power and challenge the reasons for power inequity. The two highest ranking countries in this study were the United Arab Emirates and China with scores of 90 and 80, respectively, which shows that PDI serves ultimately as something of a metric for authoritarianism. This analysis would suggest, therefore, that more authoritarian countries had greater success in limiting case rate in the COVID-19 pandemic.

The second key observation is a strong positive correlation between Individualism and case rate, meaning that more individualistic countries produced higher COVID-19 case rates. It should come as no surprise that the United States tops this list, globally, with a score of 91. Given that the opposite of Individualism is Collectivism, countries that are more tightly-knit and care more about common goals than individual outcomes were more successful in controlling the spread of COVID-19.

The third and final observation is similar to the previous, that being a strong positive correlation between Indulgence and case rate. For the context of this study, countries with high scores in this dimension heavily value much of what COVID-19 took away, i.e., partaking in social gatherings in bars, nightclubs, live sporting events, concerts, and other public settings. It tracks that high marks in this dimension relate to having higher spread rates,

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as countries with low Indulgence (or high Restraint) are more naturally willing to sacrifice these pleasurable experiences in favor of following governmental or WHO recommendations such as mask mandates, social distancing protocols, or temporary business shutdowns.

It is important to note that South Africa did not present scores for Long Term Orientation or Indulgence. As such, the correlations for these two metrics were conducted only with data from the other twelve countries this study analyzes.

Institutional Trust to COVID-19 Data

To supplement the potential pre-existing cultural factors that may explain how certain countries managed COVID-19 better than others, research into Institutional Trust was conducted. Gallup's annual publication of the Wellcome Global Monitor provides lots of key metrics that relate to crisis management, particularly Trust in Government as well as Trust in Science scores. However, there was a somewhat surprising lack of strong relationships in the correlation analysis:

Figure 3

Correlation Results Between Institutional Trust and COVID-19 Data

	Trust in Government	Trust in Science
Cases (per 100,000)	0.35	-0.26
Deaths (per 100,000)	-0.55	0.17
Vaccinations (per 100,000)	0.35	-0.12

Even so, it is worth touching on the negative relationship between Trust in Government and COVID-19 death rates. This means that countries with more trusted governments had lower relative death rates. Although this is the only key takeaway from this section of the study, it still provides valuable insight into the reasoning behind countries' success in the pandemic. It is important to relay the right messaging in times of crisis to effectively influence citizens to follow instructions for their safety. However, it is understandably difficult to follow orders from a government one does not believe is truly working with citizens' best interests in mind.

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This best explains the nature of this relationship, as countries run by governments that previously proved they could be trusted to make decisions had more success in convincing citizens to follow protocols and stay safe.

Although the correlation between Trust in Government and vaccination rate is not strong, it is still understandably positive given the aforementioned relationship between governmental trust and death rates. What is surprising, however, is that the case rate correlation metric does not follow the same logic. Perhaps citizens are more willing to trust their governments when it becomes a case of mortality but are less trusting in their everyday lives. This is likely a relationship that deserves more analysis given its contrast.

It is also surprising to see no concrete correlations, either positive or negative, between COVID-19 data and Trust in Science. These scores were generally higher than Trust in Government, which may explain why there is less of a significant relationship in either direction.

OVERCONFIDENCE BIAS

One of the main contributors to some countries' underperformance in the COVID-19 pandemic was the display of overconfidence in response efforts from those who scored high in pre-pandemic preparedness. The Overconfidence Bias is a phenomenon commonly seen in business in which firms overestimate their abilities leading to more risk-taking and less problem solving. It can also be seen when comparing pandemic performances to pre-pandemic preparedness rankings.

As previously mentioned, the United States ranked first in this study in terms of preparedness, but also first in deaths. On February 26, 2020, President Donald Trump held a press conference in which he put forward similar metrics to those outlined in the GHS Index to convince Americans that COVID-19 was nothing to worry about, and that they resided in the safest country in the world. For one, this messaging does not account for the fact that, according to the GHS's 2019 study, NO country was truly properly prepared for a viral outbreak—the United States simply happened to be the *most* prepared. Secondly, this

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messaging contributes to the creation of a false sense of security amidst uncertain times. Mere weeks later, the United States and several other countries shut down major parts of their economies and scrambled to react to COVID-19 after it had already struck. The impending issues were not proactively solved but were instead ignored and allowed to escalate beyond solvability.

THE BUCK STOPS HERE

Popularized by 33rd United States President Harry Truman, “The Buck Stops Here” is a famous slogan relating to the responsibility leaders have to act as problem solvers, themselves, rather than “pass the buck” onto someone else’s shoulders. The phrase derives from poker, as the dealer of each hand could pass on the responsibility of dealing to the next player if they chose to. President Truman kept a wooden sign with his signature slogan on his desk for many years of his presidency and went on to explain its significance in his 1953 farewell address: ““The President—whoever he is—has to decide. He can't pass the buck to anybody. No one else can do the deciding for him. That's his job,”” (National Archives). In essence, leadership can be something of a double-edged sword. Both success and failure are sure to be attributed back to leaders, no matter how warranted it is or not. Many leaders of countries in the pandemic failed to react with the swiftness required to generate a successful response, although there are likely some reasons for this.

Deciding on a solution to a problem requires first acknowledging that there is a problem, at all. To pass a mask mandate or issue social distancing protocols would signal to citizens that the COVID-19 situation was something to be seriously concerned about, and this would likely have caused unrest/panic. Leaders, particularly populist ones who had been used to spreading messages of positivity and patriotism, were stuck with the impossible task of admitting that something had gone wrong on their watch. Owning up to this reality could have hurt their approval ratings and/or cost them upcoming elections, which is likely why so many chose not to take steps to combat the virus early on.

Interestingly, leaders of the authoritarian countries studied did not face this same messaging crisis. With no democratic process in China or the United Arab Emirates, leaders in these

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countries did not have worry nearly as much about upsetting citizens or panicking them, as they could enact policies with a feeling of assurance that they would not lose power as a result. The process of not passing the buck was made much easier for them, which may have contributed to their successful responses.

PROACTIVE LEADERSHIP

The United States and other countries affected by the overconfidence bias should learn from other nations that chose to act more proactively in their attempts to deal with COVID-19.

One such example is New Zealand, as the Oceanic nation took the unprecedented step of closing its borders to all non-citizens and non-residents in March 2020. Professor Martin Berka of New Zealand's Massey University discussed this decision in an interview with BBC: "“Doing this early on with only over a few thousand cases [worldwide] at the time allowed them to basically stop the influx and stop the community transmission,”” (Jones). By July, New Zealand was completely free of COVID-19 cases according to their testing statistics, which showed that their proactive measures greatly helped in preventing the situation from developing further.

Another example of effective proactive leadership was displayed by the United Arab Emirates. The Gulf state took many steps to stay ahead of the virus and, in many cases, ahead of the world. By alerting its citizens of the discovery of COVID-19's outbreak and passing a facial covering mandate in early March 2020, the United Arab Emirates took precautionary measures to protect its people even before the WHO made its own recommendations. The United Arab Emirates's decision to switch to remote learning and working was also made ahead of many other countries, a measure that slowed the spread of the virus and likely saved hundreds of lives early on in the pandemic.

Proactive leadership is often best practiced over several years and between multiple different holders of power. This can best be displayed by South Korea and Canada, two countries that learned from past viral outbreaks of MERS and SARS, respectively. South Korea's implementation of several new pieces of legislation in 2015 allowed the governing bodies of

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2020 to have greater tools at their disposal to aid in the process of contact tracing, a critical aspect of their response to COVID-19. Similarly, Canadian health experts published reports and made recommendations for handling future situations of the same nature after becoming the non-Asian country most affected by SARS. Learning from past failures is critical to ensuring more desirable results in the future and countries that were not as proactive in their responses should begin to act as South Korea and Canada did after experiencing viral outbreak containment failure firsthand.

CONCLUSIONS

Through analysis of the data collected as qualitative research conducted in this study, some key conclusions can be drawn to answer the three research questions.

Conclusion #1

As the GHS Index outlined in its 2019 publication, not a single country worldwide was truly prepared for the outbreak of COVID-19, as can be seen by no score of 100 being administered. Each and every country had and still has plenty of room for improvement to ensure greater success in the next viral outbreak, which now feels more of a matter of when, not if.

Additionally, some high-scoring countries such as the United States and Denmark may have fallen victim to the overconfidence bias in their response efforts, which actually made them even less prepared for COVID-19 than the GHS Index predicted. This is a critical lesson for every first-world country to learn, that being wealthy, developed, and seemingly prepared is not always enough to ensure a successful response to viral outbreaks. It takes effective, proactive leadership to make full use of a country's resources, and failure to do so at a rapid pace can prove catastrophic.

Conclusion #2

As outlined in the data analysis sections, there are multiple factors that correlated with more numerically successful responses to COVID-19. To recap, here is a short list of what the correlations revealed:

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- Higher power distance = lower case count
- Lower individualism = lower case count
- Lower indulgence = lower case count
- Higher trust in government = lower death count

Conclusion #3

Perhaps the biggest takeaway from the data analysis of this study pertains to the importance of effective leadership in times of crisis. As the data shows, it is one thing to prepare for a viral outbreak, but it is another thing entirely to effectively react. Just as proactive leadership from some allowed seemingly underprepared countries to fare better than expected (i.e., Canada, Norway, the United Arab Emirates), reactive leadership from relatively prepared countries led to less successful than anticipated responses (Denmark and the United States). Clearly, leadership plays a key role in managing international crises, and world governments should all work to improve their response systems in future situations.

It is also important for leaders to recognize cultural preferences and how they relate to effective/ineffective responses. Societies that are more individualistic, by nature, may need to be more constantly reminded of the importance of measures like mask mandates and vaccines. Countries that exhibit high indulgence scores may need to be pushed more by leaders to sacrifice individual pleasure to support collective well-being. These are important factors for leaders to consider before times of crisis even begin, as they should influence the messaging conveyed when disaster strikes.

While some of this may seem obvious—that leaders should know how to lead—it is clear that certain presidents, prime ministers, and other heads of governments were motivated by external factors such as approval ratings, especially for those who were approaching elections when COVID-19 began to spread globally. Ideally, leaders would act as selfless servants of citizens and work only to shepherd countries through tumultuous times without worrying about possibly losing their power after stirring up panic. Given that this is not how many

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leaders actually act, it is important for citizens to hold reactive leaders accountable and demand more from them in future crises.

LIMITATIONS/CONCERNS

Although this study makes use of reputedly sourced data, there are still some concerns about its validity which could affect conclusions. As referenced previously, certain countries—particularly authoritarian ones—have built up a reputation over time of manipulating, falsifying, or withholding key statistics. COVID-19 data is unfortunately no exception, and one must understand this reality when drawing on this study's conclusions. All COVID-19 data for this study may come from the World Health Organization, but the figures are self-reported by individual countries and uploaded to the WHO COVID-19 dashboard, leaving plenty of room for fraud. For instance, China's death rate per 100,000 of just 8.17 feels remarkably low for a country with such high population density. Coupled with a withheld Trust in Government score, things start to look even worse for the Asian country's data validity standards. Even so, the data collected and interpreted by this study was as credibly sourced as possible, and it would have been unfair and unhelpful to completely remove figures from questionable countries from its analysis.

Another key limiting factor is the lack of a completely perfect data collection timeline. This study makes use of a 2019 pre-pandemic preparedness index, a 2015 cultural dimension rankings index, and a 2020 trust rankings index. Ideally, all three of these would be pulled from the same year so as to compare country statistics from the exact same state these countries were in pre-COVID. However, because not all of these studies are published annually—and even those that are do not always include the same countries—it was necessary to use studies from different years. While this likely does not detract significantly, if at all, from this study's findings, it would be unethical not to mention this as a potential limiting factor.

FUTURE RESEARCH OPPORTUNITIES

This study provides a solid base of information for readers to gain a deeper understanding of the impact of COVID-19 on a sample of countries with vastly different political and social

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climates all across the globe. Even so, there are several opportunities to take this research further to reveal even more important conclusions about COVID-19's effects and how to mitigate future international health crises.

One area that could be explored is a comparison between COVID-19 spread rate and individual leaders' approval ratings. This was explored briefly, but ultimately cut from this study so as to focus on answering its primary research questions. In some cases, it is likely that the two metrics moved in opposite directions over time, i.e., approval rating decreases as a response from angry citizens who are unhappy with increasing spread rates. However, there may be other cases where the two move as if they are tethered together, implying that citizens turn to their leaders for answers more when situations worsen. This could be an interesting research topic to explore further using some of this study's data and conclusions.

With this, many of the countries included in this study's sample are democratic and were led by elected officials likely seeking to retain their power beyond the pandemic's conclusion. It would be interesting to see just how many of these leaders were able to retain their power and explore some possible reasons for this. The trust scores outlined in this study may prove particularly useful in this research, although other variables would likely have to be explored in greater detail.

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APPENDICES

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Appendix A – GHS Index Structure

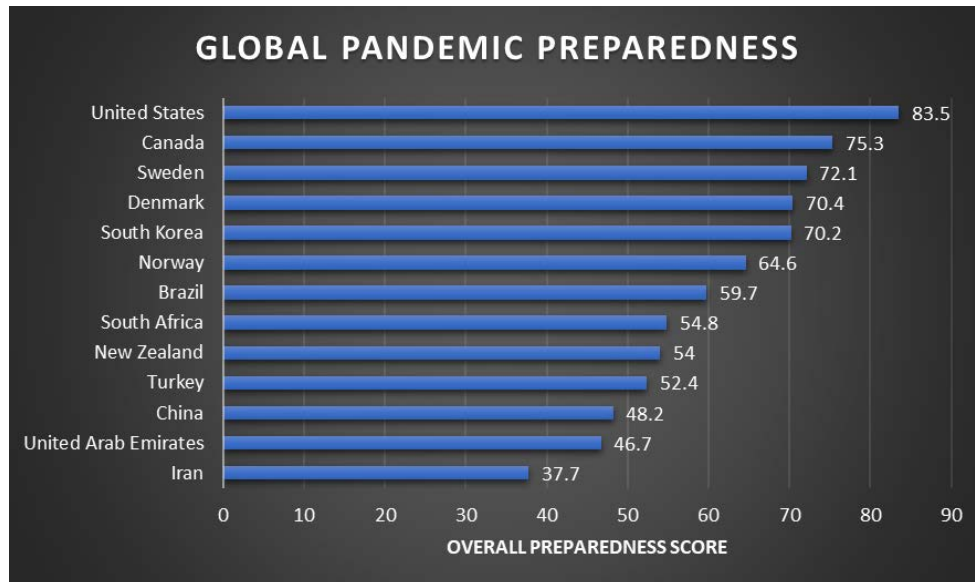
STRUCTURE OF THE INDEX



Source: Global Health Security Index

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Appendix B – Pre-Pandemic Preparedness Overall Score Rankings



Source: Author

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Appendix C – Hofstede Cultural Dimension Rankings

Country	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	Long Term Orientation	Indulgence
Brazil	69.00	38.00	49.00	76.00	43.83	59.15
Canada	39.00	80.00	52.00	48.00	36.00	68.00
China	80.00	20.00	66.00	30.00	87.41	23.66
Denmark	18.00	74.00	16.00	23.00	34.76	69.64
Iran	58.00	41.00	43.00	59.00	13.60	40.40
New Zealand	22.00	79.00	58.00	49.00	32.75	74.55
Norway	31.00	69.00	8.00	50.00	34.51	55.13
South Africa	49.00	65.00	63.00	49.00		
South Korea	60.00	18.00	39.00	85.00	100.00	29.00
Sweden	31.00	71.00	5.00	29.00	52.90	77.68
Turkey	66.00	37.00	45.00	85.00	45.59	49.11
United Arab Emirates	90.00	25.00	40.00	80.00	20.00	60.00
United States	40.00	91.00	62.00	46.00	25.69	68.08

Source: Author

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Appendix D – Institutional Trust Rankings

Country	Trust in Government	Trust in Science
Brazil	40.6	75.9
Canada	72.6	89.3
China		95.9
Denmark	79.3	91.1
Iran	45.8	84.2
New Zealand	83.7	90.6
Norway	94.3	89.9
South Africa	50.9	47.4
South Korea	52.8	90.4
Sweden	64.7	97.0
Turkey	54.9	58.4
United Arab Emirates		71.1
United States	52.5	88.4

Source: Author

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Appendix E – COVID-19 Data

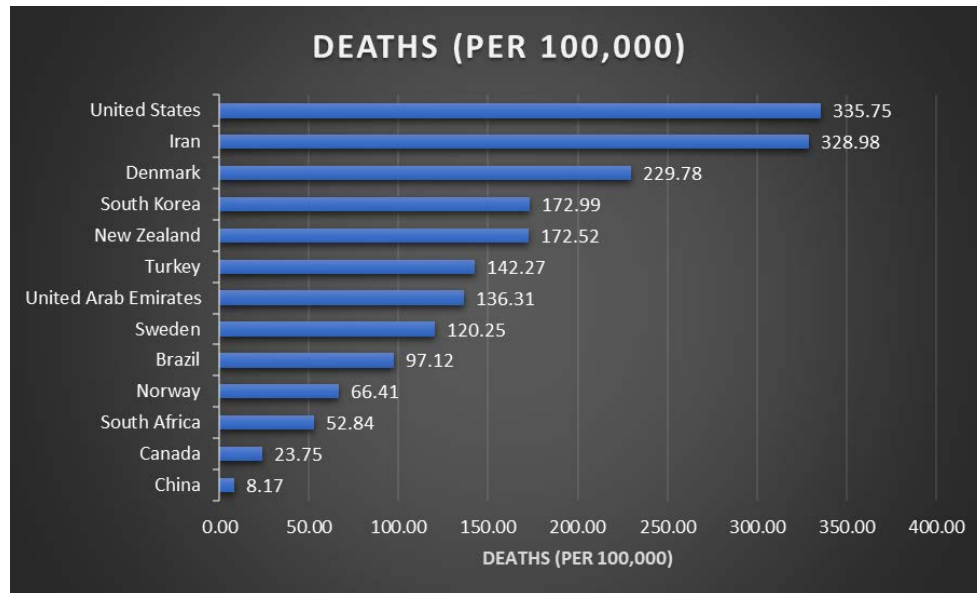
Country	Cases (per 100,000)	Deaths (per 100,000)	Vaccinations (per 100,000)
Brazil	17442.68	328.98	79790.00
Canada	12189.59	136.31	82900.00
China	6736.25	8.17	86820.00
Denmark	58459.50	142.27	82160.00
Iran	9013.55	172.52	69700.00
New Zealand	45134.67	52.84	84780.00
Norway	27560.52	97.12	75660.00
South Africa	59648.89	66.41	83800.00
South Korea	6848.20	172.99	35470.00
Sweden	26129.38	229.78	71400.00
Turkey	20162.28	120.25	60940.00
United Arab Emirates	10643.29	23.75	99010.00
United States	30890.20	335.75	68620.00

Source: Author

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Appendix F – COVID-19 Deaths per 100,000 Population Rankings

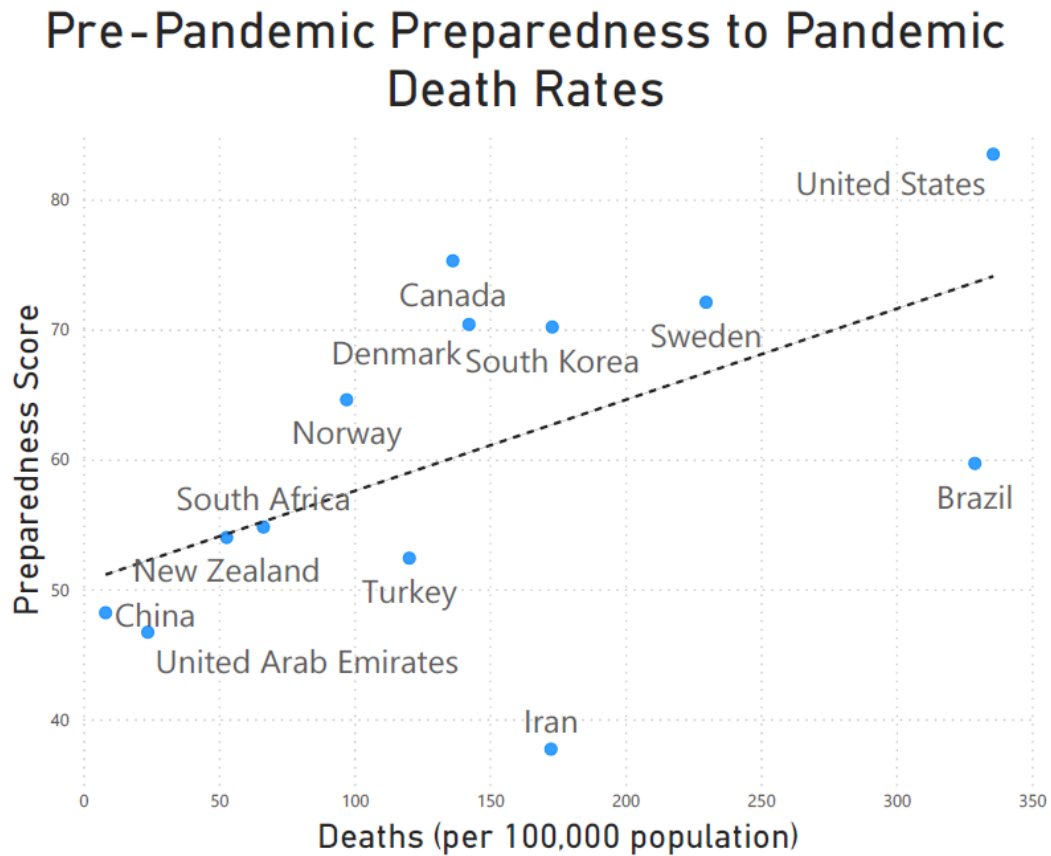


Source: Author

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Appendix G – Pre-Pandemic Preparedness to COVID-19 Deaths per 100,000 Population Scatterplot



Source: Author

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REFERENCES

- Al Hosany, F., Ganesan, S., Al Memari, S., Al Mazrouei, S., Ahamed, F., Koshy, A., & Zaher, W. (2021). Response to COVID-19 pandemic in the UAE: A public health perspective. *Journal of global health, 11*, 03050.
<https://doi.org/10.7189/jogh.11.03050>
- Bremmer, I. (2021, February 23). The best global responses to covid-19 pandemic, 1 year later. *Time*. Retrieved May 4, 2022, from <https://time.com/5851633/best-global-responses-covid-19/>
- Burki, T. (2020). China's successful control of COVID-19. *The Lancet Infectious Diseases, 20*(11), 1240-1241.
- Dimension Data Matrix*. (n.d.). Geert Hofstede. Retrieved April 21, 2023, from <https://geerthofstede.com/research-and-vsm/dimension-data-matrix/>
- GHS Index 2019*. (n.d.). GHS Index. Retrieved April 21, 2023, from <https://www.ghsindex.org/archive/>
- Goyal, N., & Howlett, M. (2021). “Measuring the mix” of policy responses to COVID-19: comparative policy analysis using topic modelling. *Journal of Comparative Policy Analysis: Research and Practice, 23*(2), 250-261.
- Greve, B., Blomquist, P., Hvinden, B., & van Gerven, M. (2021). Nordic welfare states—still standing or changed by the COVID-19 crisis? *Social Policy & Administration, 55*(2), 295-311.
- Holder, J. (2021, January 29). Tracking coronavirus vaccinations around the world. *The New York Times*. Retrieved May 4, 2022, from <https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html>
- HQ, H. I. (n.d.). *National Culture*. Hofstede Insights. Retrieved April 19, 2023, from <https://hi.hofstede-insights.com/national-culture>

The Buck Stops Somewhere: An Analysis of Global Governmental Responses to COVID-19

Honors Thesis for David Roundy

- Jones, A. (2020, July 9). How did New Zealand become Covid-19 free? *BBC News*.
<https://www.bbc.com/news/world-asia-53274085>
- Kapoor, M., Malani, A., Ravi, S., & Agrawal, A. (2020). Authoritarian governments appear to manipulate COVID data. *arXiv preprint arXiv:2007.09566*.
- Kavakli, K. C. (2020). Did populist leaders respond to the COVID-19 pandemic more slowly? Evidence from a global sample. Working Paper.
<https://covidcrisislab.unibocconi.eu/sites/default/files/media/attach/Kerim-Can-Kavakli.pdf>
- Maerz, S. F., Lührmann, A., Lachapelle, J., & Edgell, A. B. (2020). Worth the sacrifice? Illiberal and authoritarian practices during Covid-19. *I. V-Dem Working Paper, 110*.
- Merriam-Webster. (n.d.). Populist. In Merriam-Webster.com dictionary. Retrieved April 22, 2023, from <https://www.merriam-webster.com/dictionary/populist>
- McKee, M., Gugushvili, A., Koltai, J., & Stuckler, D. (2020). Are populist leaders creating the conditions for the spread of COVID-19? *International Journal of Health Policy and Management, 1-5*.
- Ortiz-Ospina, E., & Roser, M. (2016). Trust. *Our World in Data*.
<https://ourworldindata.org/trust>
- Oxford Martin School. (2022, May 3). *Total confirmed covid-19 deaths and cases per million people*. Our World in Data. Retrieved May 4, 2022, from <https://ourworldindata.org/grapher/total-covid-cases-deaths-per-million?tab=table&country=~ARE>
- Park S., Choi G.J., Ko H. (2020). Information technology–based tracing strategy in response to COVID-19 in South Korea—Privacy controversies. *JAMA*. 2020;323(21):2129–2130. doi:10.1001/jama.2020.6602

The Buck Stops Somewhere: An Analysis of Global Governmental Responses to COVID-19

Honors Thesis for David Roundy

San, S., Bastug, M. F., & Basli, H. (2021). Crisis management in authoritarian regimes: A comparative study of COVID-19 responses in Turkey and Iran. *Global Public Health, 16*(4), 485-501.