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Introduction

The topic I have chosen to investigate for my personal project examines if there is any statistically significant correlation between the number of documented Covid-19 cases (from when the pandemic started spreading in December 2019) and the top ten countries considered to have the most individualistic- or collectivist leaning social structures. I aim to see if documented Covid-19 case numbers increase or decrease consistently depending on if countries and their people operate on and value the individual as opposed to the collective, or vice versa. I am interested in this topic because I remember reading the different ways in which the Japanese and American government and its people were handling mask mandates and social distancing precautions and finding myself wondering about the impact it had on Covid-19 cases. Known for valuing the overall group's health and well-being over one's own, Japan — not least due to its people needing to cooperate with each other in a country about the size of the United States' California and with a density of 871 per square mile compared to the United States' 97 per square mile — can be considered a country that emphasizes the collective (“Countries”, “The Group”). Without the need for an entirely authoritative figurehead or government to make sure people abided by social distancing, quarantine, and other precautions born out of the pandemic, the news reported Japan was able to keep Covid-19 death case numbers low, and low for a long period of time (Matsuyama). Comparatively, there was contention in the United States on such things like wearing masks and socially distancing due to some feeling such rules were infringements on their individual rights, accompanied by many reports of spikes and outbreaks of Covid-19, notably during the winter break and summer vacation times (Andone, Goldstein, McKelvey, Sun).

Research Question

While I understand the fact that there were many other extenuating factors that may or may not have caused spikes and outbreaks in Covid-19 across the world unrelated to how individualistic or collectivist each country is, my question stands: does the value differences between collectivist- and individualistic- leaning countries impact the amount of Covid-19 cases reported in the top ten collectivist and top ten individualistic-oriented countries (“Collectivist”, “Individualistic”)? Other people have examined how collectivist versus individualistic-oriented countries impacted Covid-19 cases, with journal research articles from the national library of medicine dubbed *Assessing the role of collectivism and individualism on COVID-19 beliefs and behaviors in the Southeastern United States*, or other articles like *The relationship between measures of individualism and collectivism and the impact of COVID-19 across nations* from science direct. However, I believe my approach to this question will be original in the way I visually represent my data and correlate findings, if any. One existing article “*The Tragedy of the Commons*”: *How Individualism and Collectivism Affected the Spread of the Covid-19 Pandemic* shows one positive correlation line between deaths by Covid-19 and an individualism scale, but I hope to show more comparison, with scatter plots and best-fit lines of the top ten considered individualistic countries, the top ten considered collectivist countries, and a comparison between individualistic and collectivist countries on reported Covid-19 cases included in my project.

Materials/Methods

I plan to use python libraries like seaborn and pandas for processing numeric data and visually representing it through graphs for my methods and techniques. I will use data from the *World Health Organization* that has documented data from the start of Covid-19 (December of 2019) to the present (June of 2024), pandemic-related datasets from *Our World in Data*, and government responses to Covid-19 from UNICEF, among other dataset websites and sources (Edouard, “Dashboard”, “Number”). Furthermore, since published articles focusing on this topic already exist, I believe reviewing, manipulating, and even topic modeling two to four text articles could add to this project. In a similar way to the example project titled *Feminine and Masculine Cultures*, I can process these texts to see if there are any commonalities in the words they use for collectivist impact on Covid-19 reported-cases compared to individualistic country impact, or even the most common phrases or words used in the articles related to individualistic versus collectivist impact on Covid-19 cases. Pie charts, bar graphs, and word clouds would be additional methods and techniques helpful in visually representing the number of words used to describe and analyze my research topic.

Results

I expect the data to reveal that at the beginning of the pandemic, the impact of group versus individual will be seen, with countries like Japan having lower Covid-19 cases compared to that of the United States. However, as borders start to open up (for instance, Japan had closed its borders to foreigners for a long time, but when they started opening up, there were outbreaks), and as Covid-19 continues into the 2021 to 2022 years, there will be a more-or-less equal ratio of Covid-19 cases to country population, even as Covid-19 vaccines mitigate high increases in Covid-19 cases. Whether or not one has been raised in a country that values the collective above the individual, I think I will find results that demonstrate a worldwide disease will still find its way to a country’s population in some form or another — even if actively adhering to preventative policies can slow the spread of a pandemic in the beginning. Of course, much of my hypotheses are based on what I had mentioned in my introduction, with much of the news I focused on relating to which countries experienced or didn’t experience large Covid-19 emergencies. Japan was the most prominent standout for not experiencing a large wave of cases but I did not pay the same amount of attention to Covid-19 cases in the other top countries considered to be collectivist-leaning.

Discussion

The new knowledge I might gain from my specific piece of research could be whether or not the values we have learned growing up had any effect on Covid-19 cases, with broader implications in this field of study pointing to how the values of a country impacts or indicates the way each country will, or has the capacity to, deal with national emergencies and situations. It might also point to how we as humans can better implement, fuse, or merge parts of the individualistic and collectivist social systems that do work into something that could promote better collaboration and work with each other and other nations in the future.

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