The City University of New York

School of Professional Studies

The Underlying Facts about U.S. demographics before and after Covid19 Pandemic

Analyzing the U.S. demographic stats for household number of children, marital status and life expectancy in contrast to other countries

By

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1 Abstract/Executive Summary

There are many studies conducted on Covid19 pandemic in evaluating the spread of the disease within the population across U.S and other countries. These studies are in terms of quantifying the number of contaminated and deaths. However, little research has been done to explore the impact of Covid19 pandemic on the population demographic. The purpose of this study is to investigate the population demographic facts such as the number of children per household, marital status and life expectancy

before(2019) and after (2021/2022) Covid19 pandemic. This research will compare U.S. results to the other most impacted countries by Covid19.

This research will be conducted in academic approach and will go through data collection from official sources (U.N , etc,) and perform data analysis applying explanatory analysis method using R and Python programming languages.The data visualization will be wrapped in apps for easy use.

One of the most popular preventive measures used during Covid19, stay home/ Working From Home(WFH) was found to have a significance on the increase of number of children per household in the U.S (other countries as well?). although this study definively answers questions regarding the correlation between the Covid19 pandemic on the population demographic, further studies are needed to take the analysis at the state level and possibly create a map for a better visualization.

2 Literature Review/Research Conducted

Recent studies show that China was already experiencing Covid19 deaths, By the end of 2019. Then, the Covid19 rapidly spread and went viral in many countries. The Covid19 pandemic has been causing death globally for the past 03 years(2019-2022).

3 Theory and Hypotheses (if applicable)

if people had less children is that due to fear related to COVID-19, effects on the economy,

4 Data and Methods

5 Results

6 Discussion

7 Conclusion

8 References

http://data.un.org/Data.aspx?d=GenderStat&f=inID:37&c=1,2,3,4,5,6&s=crEngName:asc,sgvEngName:asc,timeEngName:desc&v=1#GenderStat

https://unstats.un.org/unsd/demographic-social/products/dyb/dybcensusdata.cshtml

http://data.un.org/Data.aspx?d=POP&f=tableCode:323

http://data.un.org/Data.aspx?d=POP&f=tableCode:40

http://data.un.org/Data.aspx?d=POP&f=tableCode:330

http://data.un.org/Data.aspx?d=POP&f=tableCode:41

http://data.un.org/Data.aspx?d=POP&f=tableCode%3a325

http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23

https://app.datacamp.com/learn/projects/166?open-modal=project-upgrade-modal

8.1 R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
#We have created a framework application that you can use to test out different RMarkdown functi

# RMarkdown Web
#introDS::runShiny('rmd')

# RMarkdown Mobile
#introDS::runShiny('rmd_mini')
```

```
# package names
packages <- c("tidyverse", #"magrittr", ################### Tidyverse, dplyr, magrittr packages
              "here",############################################ Directory management
              "knitr", "rmarkdown", ############################## Rmd libs
              "tinytex", ######################################### PDF output
              "stargazer", ####################################### Tables
              "todor", "lintr", ################################## Code Management libs
              "DT", "kableExtra", ################################ Table libs
              "roxygen2", "testthat", "usethis", "devtools" ###### Package libs
              )

options(repos = list(CRAN="http://cran.rstudio.com/"))

# Install packages not yet installed
installed_packages <- packages %in% rownames(installed.packages())
if (any(installed_packages == FALSE)) {
  install.packages(packages[!installed_packages])
}


# Packages loading
lapply(packages, library, character.only = TRUE) %>%
  invisible()
```

```
# Automatically create a bib database for R packages
knitr::write_bib(c(
  .packages(), packages # This is made in the lib loading section
), 'packages.bib')
```

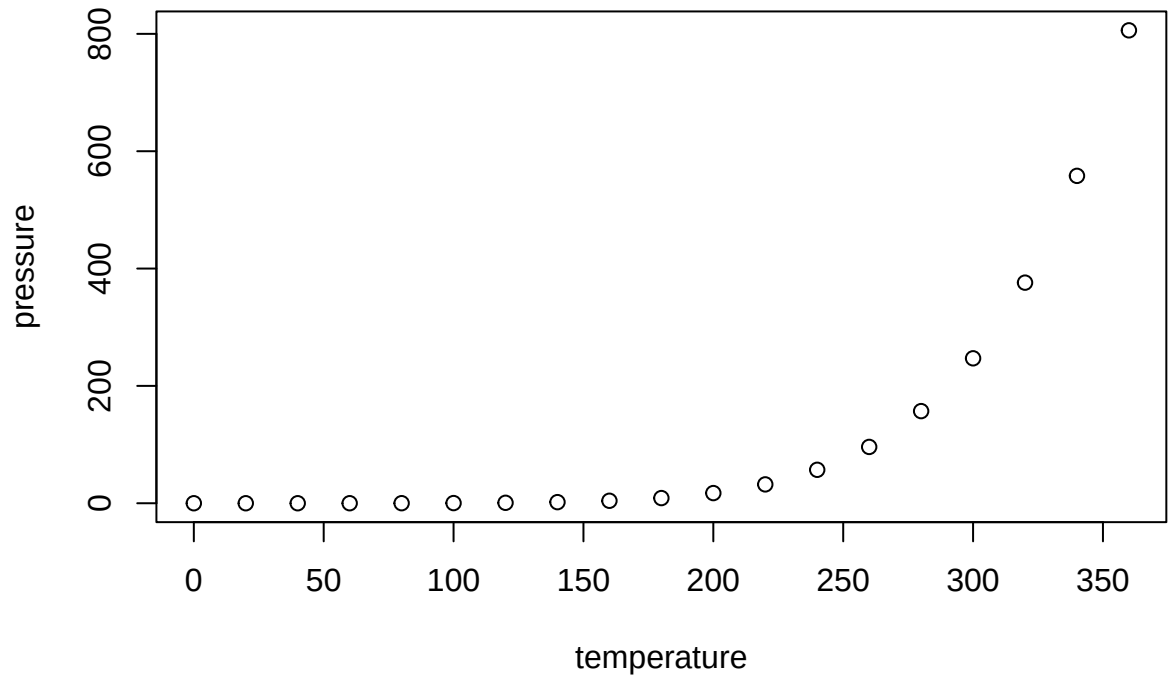
```
library(stargazer)
stargazer(cars,
title = "Summary table with stargazer",
label="tab1",
```

```
table.placement = "H",
header=FALSE)
```

```
##
## \begin{table}[H] \centering
##   \caption{Summary table with stargazer}
##   \label{tab1}
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
## Statistic & \multicolumn{1}{c}{N} & \multicolumn{1}{c}{Mean} & \multicolumn{1}{c}{St. Dev.}
## \hline \\[-1.8ex]
## speed & 50 & 15.400 & 5.288 & 4 & 25 \\
## dist & 50 & 42.980 & 25.769 & 2 & 120 \\
## \hline \\[-1.8ex]
## \end{tabular}
## \end{table}
```

8.2 Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

8.3 References