Google Trend Keyword Research

# Introduction

* A 250-500-word paper summarizing the following: Statistical/Hypothetical Question
  + Outcome of your EDA
  + What do you feel was missed during the analysis?
  + Were there any variables you felt could have helped in the analysis?
  + Were there any assumptions made you felt were incorrect?
  + What challenges did you face, what did you not fully understand?

Google trend is a tool that allows a user access to people searches made in Google. The search data you entered can be combined with another data point where results are broken down by total searches of the geography and time it represents. This can be used to provide insights and statistics to topic, or text used as searched input.

## Does Lunar Calendar affect health and behavior?

Lunar Calendar is a monthly cycle of the moon, and it has been known that specific lunar phases have an impact on human and animal behavior. There have been studies correlating the lunar cycle impact to human reproduction, birthrate, aggressive behavior. I have used these related terms and phrases in Google trend and identified a set time for a specific lunar calendar phase and see if we can correlate these with the lunar calendar. The most recent day of the full moon was on the evening of Sunday, August 22, 2021. I have identified keyword search and used the 30-day time range, which is inclusive of this full moon date, to investigate public interest is peaking or declining over time and try to correlate them with this lunar phase.

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### Behavioral Impact.

I found out that there’s an upward trend in Suicide within the range of the full moon phase while no trending pattern correlation on other search terms has been identified.Chart

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### Best time to plant

Many gardeners and farmers have been using the lunar calendar to have a productive garden. They believe that the moon phase impacts plant growth because of the gravitational pull, which causes tide’s behavior, thus also impacts the soil moisture. Google trend shows increase popularity on plant keyword search in relation to full moon calendar phase other than farming search keyword where popularity does not seem to correlate to full moon.Graphical user interface, chart, application

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### Animal Behavior

### It is also known that moon phases have effects on animal behavior. Researchers have also been investigating moonlight effects on animals and continue to make correlations which include fish growth, mass migration, and prey behavior. Google trend shows increased interest in fishing and hunting on full moon. This may be because of a known fact that fish are most active during a full moon because tides are higher the usual. Chart, line chart Description automatically generated

### Violence, Crime, Assault, Domestic Violence

The word lunatic is derived from “luna” which means moon, is used when people show aggressive and mad behavior. It is known that full moon influences violence, aggression, arson, crime, and patients in psychiatric hospitals are acting more. Google trend shows that there are no significant public searches that show aggression on humans, but alcohol and suicide search interest increased and peaked on the recent full moon.Chart, application, line chart

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## Why Life Expectancy in the US decline?

America has continued to decline life expectancy between 2010 and 2020 at birth compared to large and wealthy countries. Life expectancy can be caused by an increase or decrease in death rates. Google trend shows consistent public search interest on negative contributions of life expectancy between 2018 and 2021, but slight increase particularly on Crime, Cancer, and Suicide thus, this may be correlated to continue decline in life expectancy. It also shows a very much obvious primary cause of life expectancy decline rate in 2020, which is due to the mortality rate caused by COVID-19.

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## Travel and Commute Behavior

The Covid pandemic has dramatically impacted the travel industry and commute. Google trend shows a decline in search interest on commute-related keywords during the lockdown. It shows a gradual increase in interest from summertime, but again, a slowly decreasing trend may be caused by the surge in virus rate due to the delta variant.

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## Is human behavior after the Pandemic better or worse?

With lives starting to somewhat go back to normalcy and pandemic end is insight, are people facing the new normal with a positive outlook in life, or are more people feeling stress, anxiety, and negativity? Google trend shows an increased interest in caring for families, which could mean that the pandemic brought families closer. However, there are no significant changes in people's search interest to show a decrease in any negative thoughts. So maybe it is too early to tell how pandemic has changed our outlook in life.

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## What Top Career will matter in the next years?

Popular careers and work patterns have been changing because of demands, technology, automation, and the pandemic. However, Google trend shows for the past 5 years, the medical and engineering career continues to dominate the people search interest while other comparable careers trends remain consistent.Graphical user interface, application

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## Why there’s a decline in Church-Going?

Last week, I attended a church service, and the priest's sermon touched on the significant decline in church attendance in the US. So, I thought of searching keywords related to religion and church and examine if there's an insight that we can get from Google Trend. Google trend shows that there's increase of Church-related inquiries for this year as well as increase interest on 'No Religion' and 'No God' keywords. So, this may mean that the decline in church-going or membership may not be attributed to declining church attendance but could be due to increase of American which non-religious believers or no religious preferences are a factor.

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## Conclusion

Google trend is a good research tool to capture people's interest and curiosity on a specific topic. However, it is challenging to identify what particular words or phrases that can generate the most results when researching. I have learned that to get a more meaningful result, one must be creative in selecting a variety of keywords that are most often people used for searching in google. The higher the volume used, the more accurate and reliable results on people's interest and behavior over time would show in google trend.

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