

# Project Proposal

Team name: TheHappyCo

Team members: Arvin Seeva, Stephen Guilmartin, Kom, Abby Asomani

## Project Description

As a team, we believe that wellbeing is a key part of human life and growth. We intend to explore the idea of data being used to track and analyse human behaviour in terms of well-being. We will look into datasets available for public usage. We are keen to understand the idea of happiness and how that is applicable globally. We will study general areas such as economics, social, health and environmental factors.

## Questions/areas to investigate

### Area 1: The geography of happiness (2020 data) [group]

- What are the happiest countries? Top 10
- What are the least happy countries? Bottom 10
- What are the happiest/least happy continents/regions? (country groupings)
- Breakdown of country scores by factors (similar to a stacked bar graph)
- Comparison of countries (use of z scores)

*Visualisations: Happiness map (heat map), bar graph?*

### Area 2: Factors influencing happiness (social, political and economic) (2020 data) [Arvin]

- Correlations between factors within the happiness index and happiness score
  - GDP per capita
  - Social support
  - Healthy life expectancy
  - Freedom to make life choices
  - Generosity
  - Perceptions of corruption
- Could do a “deeper dive into” happiness and wealth: Does happiness increase with GDP? Is there a relationship between wealth and happiness?

*Visualisations: Linear regression plots, radar/spider chart plot*

### Area 3: Happiness, religion and alcohol (external factors) [Kom & Stephen]

- Is there a relationship between religion and happiness?
- Is there a relationship between alcohol and happiness?
- Investigate extreme cases e.g. very religious/less religious countries and happiness
- Correlations between happiness score and the other factors (linear regression plots). Which is the “juiciest”/most interesting?

*Visualisations: Linear regression plots, ...*

### Area 4: Happiness and time (2015-2020) [Abby]

- How does happiness change over time? Within particular countries? Globally e.g. is the world, as a whole, getting more or less happy?
- Are there external factors (e.g. world events) that could explain changes?
- What perpetuates or diminishes happiness over time)? E.g. The US ranked 11th in 2012, but has fallen to 18th in 2020. China. Meanwhile, Finland is consistently at the top of the list.
  - Before and after an event e.g. Trump, change of government, gender of leaders
- Also the concept of “unexplained happiness”

*Visualisations: line chart, timeline with dates ([example](#))...*

## Data sources

World Happiness Report data (2015-2019) in Kaggle:

<https://www.kaggle.com/unsdsn/world-happiness>

World Happiness Report data (2020):

Religion data (2010): <https://datahub.io/sagargg/world-religion-projections#data>

Happiness and alcohol consumption:

<https://www.kaggle.com/marcospessotto/happiness-and-alcohol-consumption>

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