

## World Happiness Score Based on Time Use

### Data Story

Is there evidence that how we use our time changes how happy we are as a country?

### **BACKGROUND - Some basic info**

### Data Details

Data Set 1: Time Use Survey - *Eurostat, European Commissions*

- This particular set of data caught my eye because in their report they talk about this data being used by policy makers. They wanted to know how much productive time was actually spent by their workforce. They also wanted to better see the division of labor between men and women. While this data could have flaws from biased collection sources, using it to compare with happiness ratings will be interesting, but not conclusive in any way.
- Source Website: <https://perso.telecom-paristech.fr/eagan/class/igr204/datasets>  
[https://ec.europa.eu/eurostat/cache/metadata/en/tus\\_esms.htm#rel\\_policy1573562814206](https://ec.europa.eu/eurostat/cache/metadata/en/tus_esms.htm#rel_policy1573562814206)
- Data Files: Timeuse.csv (Data Table from surveys taken between 2009 - 2014)
- Data Wrangling:
  - Read csv into global environment, saved as "TimeUse"
  - Males and Females were separated with all males listed first then all females - changed to be by country - male and female together

Data Set 2 & 3: World Happiness Report - *Kaggle, Gallup World Poll, and the United Nations*

- Once I found the time spent report I thought the most interesting thing to compare it to would be global happiness. In Kaggle there was a discussion on it's data. The Gallup World Poll takes annual surveys that try to catch a good representation of the nation. They study what is going on in our lives throughout the world. They work together to answer questions about life and humanity. One of the big current projects is to "measure the will of every person on Earth." One of the data tables they have been able to create from these surveys is the Happiness Report.
- Source Website: <https://www.kaggle.com/unsdsn/world-happiness>

- <https://worldhappiness.report/ed/2020/#read>
- Data Files: Kaggle: 5 csv files for data from 2015-2019  
WHR: xls file Happiness Change from 2008-2012 to 2017-2019
- Data Wrangling:
  - Kaggle Files: Read in csv files - I had to double check that they were saved in my current working directory.
  - World Happiness Report: Read in xls file
    - Load "readxl" library
  - All Tidy

### Data Wrangling (COMBINING THE DATA SETS)

- **Remember the question:** "Is there evidence that how we use our time changes how happy we are as a country?" The data we are comparing is time use vs. happiness
- We need to join our "world happiness report" with our "time use"
  - For now I still want the data for any unmatched data in the two sets so I will do a FULL join.
- I had to go back to my 2 data sets to change the name of the country column so that they matched and joined.
- Now, I am interested in leisure time and work time, and then comparing those specific Datasets with the different happiness rankings for different years. So I need to select the specific columns and assign them to a new data set
- Now I want to join this with the world happiness change. This will show us how time is spent, happiness rank, and how those scores have changed over time.

### Further Analysis

This was a really cool data set to put together and I would love to look at a greater time-frame in the future. For example, compare the last 50 years. Seeing how all sorts of factors contribute to male and female happiness.