**Does gender equality play a role in the perception of happiness of a country?**

**A study based on the Global Gender Gap Report 2020 and The World happiness report 2020. Data referred to a pre-covid19 world.**

1. State of art and current state of the gender gap from the global gender gap report 2020
2. How the gender gap is calculated: subindexes and what is still an open gap, focusing on outliers
3. Question: Are these countries, especially the outliers, happy countries?
4. How the happiness score is calculated
5. Scatter plot (gender gap score vs happiness score). The correlation is fairly significant: a gender equal world is a happier world. However, the data are quite spread and if we divide this plot in quadrants we we are talking about 153 countries and from the outlier countries we can infer that not always a gender equal country is happy, and a happy country is gender equal. We also expect that those countries that are in war or extreme poverty of course cannot perceive themselves as happy.
6. I reduced the dataset at those country that are actually above the average of the gender gap score and I looked at the correlation in a scatter plot. The correlation is still significant from a statistical point of view: the higher the gender gap score, the happier is the country.
7. To conclude my study, I wanted to see which factors contribute the most to the perception of happiness, keeping in mind that gender equality significantly correlates with happiness and therefore I included the subcategories of the global gender gap in a dataset together with the subcategories of the happiness report to see which of them is more important. I Enlarged the datasets with other datasets (wages, unpaid domestic work, labour participation) and I run a correlation matrix based on the gender gap score. And these are the results considering the 153 countries: **Labour force is extremly significant. It is followed by social support, freedom to make life choices and healthy life expectancy which are significant too. Surprisingly GDP per capita seems to be not significant.**
8. I subset the whole dataset for regional indicators, to avoid cultural and economic biases and these are the results:
9. In conclusion we can infer that a world where women have equal rights and are included in the political and economic decisions is a happier world