

# World Happiness Report

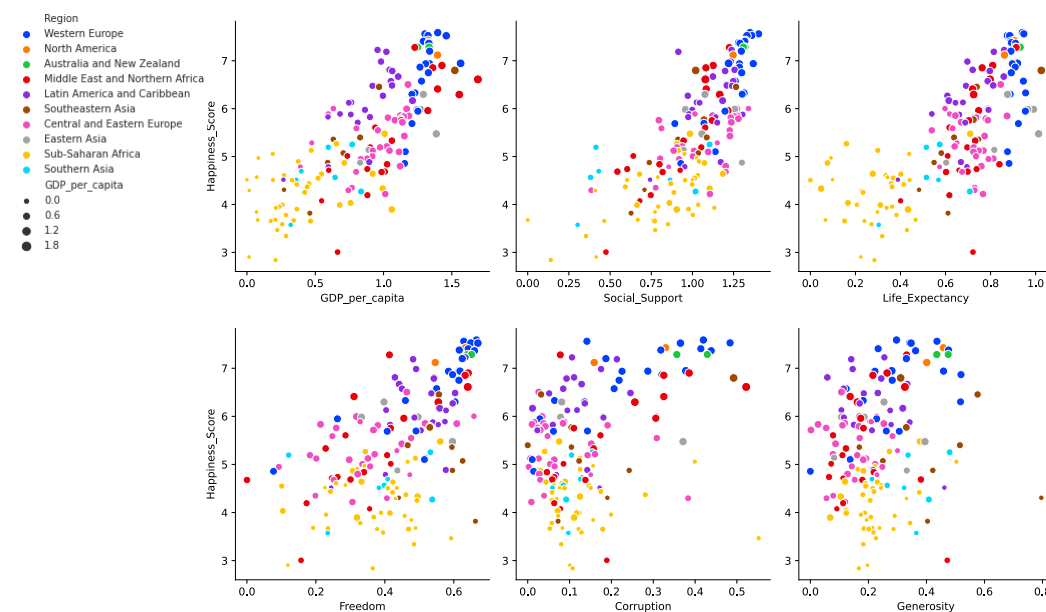
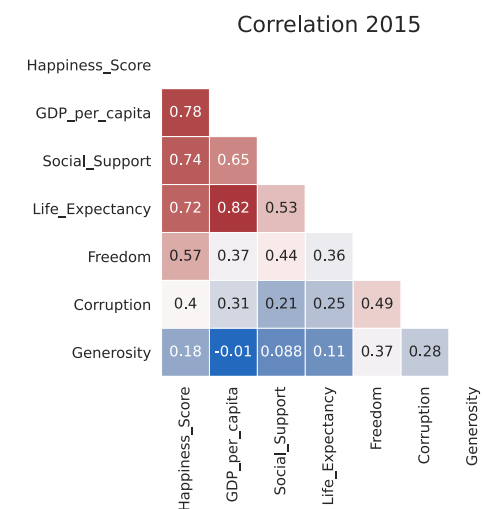
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## Factor Analysis

### different factors have different influence

The hypothesis of money being the most important factor is to be either confirmed or denied based on this survey. Let's see how important different factors are to determine the happiness. As you can see in the correlation graph, GDP per capita is the most important factor, followed by Social Support and Life Expectancy. These three main factors can predict your happiness with the best accuracy and should all be looked at. Money most certainly makes the world go round, but without a stable social structure around a person and a future that has many happy years to come, it won't make the people feel as good.

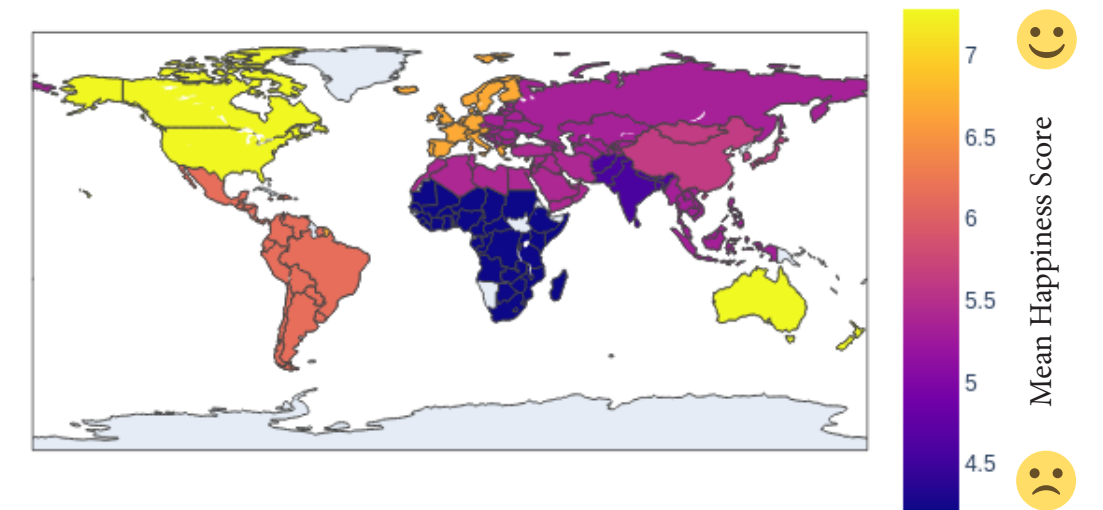
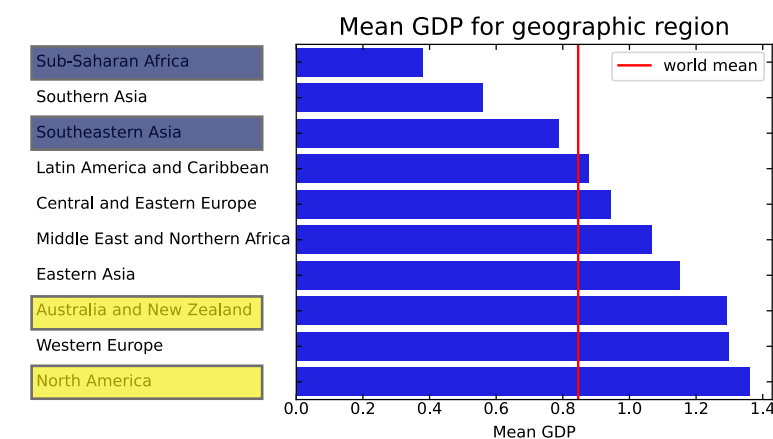


Another way to see the influence of factors like money (GDP per capita) or corruption are scatter plots. As it is visible in these graphs, the main three factors (GDP, Social Support and Life Expectancy) influence happiness the most, while Freedom, Corruption and Generosity are almost randomly structured. The graphs show each contributing factor related to happiness, while size of each dot represents GDP and colour the geographic region. Happiness clearly is dependent on money, social support and life expectancy, but they are almost equally important.

# Money makes the world go round, but does it really?

Analyzing the data published by the United Nations makes us believe that this statement is true. It is no easy task to measure happiness as it is very subjective. Ultimately our goal in life and every humans desire is to live a happy and fulfilled life. But when do people feel the happiest? Is it really just money?

## Worldwide Happiness



The previous analysis is made on a worldwide scale, but how is happiness spread throughout the world? If we take some regional averages and compare them, the result is as shown in the world map. The message is clear: Happiness is strongly dependant on the region where you are living. Countries like Australia, Western Europe and North America are a lot happier on average than countries in Africa. This also aligns with the hypothesis where money makes the world go round. As we can see Sub Saharan African GDP per capita is well below the mean GDP per capita worldwide. In general developing countries have a smaller GDP in comparison to first world countries.

## Conclusion and reflection on project development

To answer the main question of this poster, it can be said that money definitely makes the world go round. But it is not just money as the results show. Social support and a long life expectancy also strongly influence the feelings of the people all over the world. Regional averages support this conclusion and show clear differences based on the place of residence.

Working with this dataset was a big learning experience, both in the terms of understanding happiness, but also in creating a visualization and applying the principles of the module hands-on. After cleaning the dataset and first explorations, we realized that we needed to select a key message for the poster, since there is much more to analyze and show than we could ever include in one page. The decision to choose python based tools for our project supported us with a lot of freedom but also useful libraries. The main tools were Pandas, Matplotlib, Seaborn and Plotly Express. The documentations and examples are helpful and provided a good structure for this project. We enjoyed the learning process during this module task and were able to learn a lot about visualizing data in a productive way.

## References

- [1] UN: World Happiness Report. 2015-2019
- [2] OECD: OECD better life index
- [3] Seaborn Doc
- [4] Matplotlib Doc

- <https://www.kaggle.com/unsdsn/world-happiness>  
<http://www.oecdbetterlifeindex.org/>  
<https://seaborn.pydata.org/>  
<https://matplotlib.org>

## Like to know more?

If you'd like to discuss our findings or have any further questions please reach out to us.

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JupyterNotebook of the results:  
[https://github.com/RomanSutter/TSM\\_InfVis](https://github.com/RomanSutter/TSM_InfVis)