

# CAPSTONE III: PROJECT PROPOSAL

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ROMA OEH  
415.827.7662  
ROMAOEH@GMAIL.COM  
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(1.) What dataset or datasets do you plan to use? What are the features, rows, and data types of each?

I plan to use the World Happiness Report 2005 - Present Dataset provided by Kaggle and sourced through:  
Editors: John Helliwell, Richard Layard, Jeffrey D. Sachs, and Jan Emmanuel De Neve,  
Co-Editors; Lara Aknin, Haifang Huang and Shun Wang, Associate Editors; and Sharon Paculor,  
Production Editor

Citation:  
Helliwell, John F., Richard Layard, Jeffrey Sachs, and Jan-Emmanuel De Neve, eds. 2020.  
World Happiness Report 2020. New York: Sustainable Development Solutions Network

[Link to Dataset](#)

Variable	Quantitative or Qualitative?	Variable Type
Country	Qualitative	Nominal
Region	Qualitative	Nominal
Year	Quantitative	Continuous
Life Ladder (Happiness Score)	Quantitative	Continuous
Log GDP Per Capita	Quantitative	Continuous
Social Support	Quantitative	Continuous
Healthy Life Expectancy	Quantitative	Continuous
Freedom to Make Life Choices	Quantitative	Continuous
Generosity	Quantitative	Continuous
Perceptions of Corruption	Quantitative	Continuous
Confidence in National Government	Quantitative	Continuous
Positive Affect	Quantitative	Continuous
Negative Affect	Quantitative	Continuous

## (2.) What research or business questions do you want to answer?

I want to know what factors contribute most to the Happiness Score across the different countries. Which countries are the happiest versus which are the most unhappy?

Is there a relationship between GDP Per Capita and the Happiness Score? Can money, in fact, buy happiness?

Is there a correlation between Perceptions of Corruption and Confidence in National Government? Do the injustices of corruption lower a society's political trust?

## (3.) What are your hypotheses?

My **first hypothesis** is that GDP Per Capita and Happiness Score are interrelated. I would expect financial status affects overall wellbeing, meaning a lower income could predict less happiness. It implies that higher economic prosperity, as measured by GDP Per Capita, can contribute to greater levels of happiness within a population. The null hypothesis suggests that variations in GDP Per Capita do not have any impact on the level of happiness reported by each country. The alternative hypothesis, on the other hand, proposes that there is a relationship between the two variables, indicating that an increase in financial resources may be associated with higher levels of wellbeing. There should be correlation coefficients of at least 0.5 to confirm this.

My **second hypothesis** is that there could be a relationship between the perceived level of corruption in a country and the confidence citizens have in their national government. The null hypothesis assumes no relationship, while the alternative hypothesis suggests presence of a correlation, either positive or negative. I will test this at the 95% significance level.

## (4.) How will you use your data to test your hypotheses?

To test these hypotheses, I will perform statistical analysis and visualization techniques. I will calculate correlation coefficients to measure the strength and direction of relationships between variables. Additionally, I will conduct hypothesis tests, such as regression analysis, to determine the significance of the variables' impact on the Happiness Score. I will use the independent samples t-tests to check for scoring differences and if the p-value associated is below a predetermined threshold (e.g. 0.05), we can reject the null hypothesis to conclude that there is evidence of a relationship. I will also create a scatter plot to visually examine the relationships and look for any noticeable patterns or trends that suggest a correlation.

#### (5.) Who will find your findings valuable, and how will they use them?

The findings of this analysis will be valuable to policymakers, researchers, and organizations focusing on wellbeing and happiness levels worldwide. By understanding the factors influencing happiness, policymakers can formulate effective strategies and allocate resources to enhance the wellbeing of their populations. Researchers can use the findings to further investigate the determinants of happiness, contributing to the field of positive psychology and social sciences. Organizations and institutions aiming to promote happiness and wellbeing can utilize these insights to design interventions and programs that cater to specific factors influencing happiness.

Happiness scores may indicate better or worse living conditions, which can influence property demand and long-term value. Higher GDP per Capita and lower Perceived Corruption are likely to have a greater consumer base with higher disposable incomes, making them potential target markets for premium products. Additionally, marketing and advertising companies can develop strategies that resonate with consumers' desires for happiness, wellbeing, and positive experiences. These strategies can drive brand loyalty, increase engagement, and ultimately lead to more effective marketing campaigns and improved business outcomes.

| THANK YOU