

Using Data Science to Explore the Relationship between World Happiness Rankings and Life Evaluation Factors

In a society that is increasingly driven by money and power, happiness and the well-being of the public have the potential to be overlooked and under prioritized by leaders and their governments. In response to this, the General Assembly of the United Nations adopted Resolution 65/309 and began publishing the annual World Happiness Report (WHR) in 2012. The report ultimately reflects an international demand for a greater understanding of happiness, calling attention to using well-being as a criteria for government policy. The data found in these reports provides intriguing insights into the state of satisfaction within different countries. If properly analyzed by a data scientist like you, the World Happiness Report has the potential to help determine what factors contribute the most to a country's happiness and how these factors can be prioritized when achieving socioeconomic development. As a result, by analyzing this data, you would not only hold an important role in the technical analysis of global data, but also in the guidance of public policy and the implementation of new national programs.

In more detail, the WHR reviews the current state of happiness in the world and illustrates national variations in happiness. As happiness is increasingly considered an important measurement of the effectiveness of public policy and the success of a country's programs, World Happiness scores can be employed to strengthen societies and achieve better standards of living. By examining the relationship between World Happiness scores and life evaluation factors, the construction of a time-series regression model could accurately determine future happiness metrics.

The Deliverable:

In relevance to the aforementioned information, the United Nations is seeking a data scientist to effectively analyze the World Happiness Report and its associated life evaluation factors to subsequently provide a time-series regression model that can accurately predict future World Happiness scores based on life evaluation factors. The task requires an initial analysis of the data to determine the impact of the given life evaluation factors. A regression analysis can then be used to develop a predictive model whose accuracy can be tested on the given dataset and a chosen year (2022) that is not included in the original dataset. The results you provide will have the potential to be used in a broader context by policymakers who can examine the accuracy of the model and be inspired to leverage your created model or models alike to prioritize the most significant factors contributing to a country's happiness. In doing so, the deliverable you provide should highlight which socioeconomic components of a nation are most important for the well-being of its citizens in order to achieve a stronger social fabric and better public welfare.

