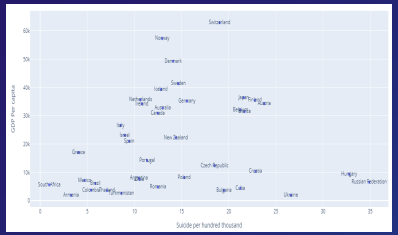
SUICIDE ANALYSIS AND PREDICTION

Introduction

This iteration is a deep dive into the suicide dataset to learn much more about the reasons for the thousands of suicides that occur each year around the world. Even though various studies on suicide have already been done previously, such as John et al. (2018), this study aimed to produce new insights that can help government bodies better grasp the problems that lie beneath them.This research could also benefit them in developing new strategies to minimize mortality rates over time. This research will look at a variety of suicide attributes and predict how many more fatalities will occur in various countries in the next years .

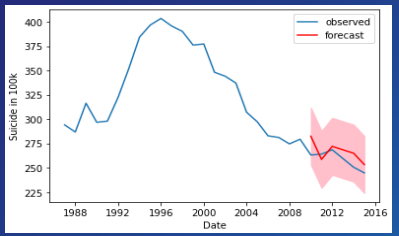
Objectives

The goal of this research is to figure out why people commit suicide in each country. Every year, 800,000 individuals commit suicide, according to Wikipedia (2012). Suicide, for example, is becoming a more prevalent and serious problem in India, according to the World Health Organization (WHO). To address these issues, we must examine various patterns and clusters in the data and determine what circumstances cause someone to consider suicide .



Research Questions

1. Check relation between GDP Per Capita and suicide rate
2. Which country is affected by the highest number of suicides with respect to population?
3. Which age groups is more likely to suicide?
4. Predict number of suicides going to happen in each continent in next 5 years
5. Predict top 5 countries with least number suicides in coming 5 years.
6. Find out the age group of people who are more likely to suicide .



Results

Models such as ARIMA, VAR, and AR were utilized to investigate and forecast the effect of suicide in different nations in this work. All of the models were built using the 'Russian Federation' suicide dataset as a starting point. When compared against other algorithms, the ARIMA model outperformed the others. One of the models, called SVM, has been found as a good fit for working on the suicide dataset, which must be done alongside other models that have already been completed. In comparison to other models, ARIMA and Decision tree classifiers provided me with greater accuracy .

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