Revealing the Effects of Outer Factors in Suicide

Summary

This project seeks to conduct an in-depth analysis of suicide statistics, aiming to unravel the underlying causes, patterns, and potential correlations with happiness. By examining various datasets, we aim to contribute valuable insights into the complex dynamics of mental health.

Problem Definition

The project addresses the need to understand the intricacies of suicide statistics, identifying patterns and exploring why, unfortunately, certain people suicide. There is also an investigation on whether there is a correlation between suicide rates and happiness level or not. We aim for this purpose to make use of datasets from the Turkish Statistical Institute (TUIK) and, depending on availability and relevance, from global organizations and suicide prevention foundations.

Datasets Sources

TÜİK is seem the best information source for this kind of things so we get almost all datasources from there and add one external datasource from WHO to expand the scope of our project . The hardest part of this project seems to be cleaning the data and merging all datasets. Here are our databases and their explanations:

1. age_happiness_percentage:

    - Description: This dataset contains information about happiness percentages across various age groups according to a study. It includes data on the happiness levels of individuals in different age intervals.

    - Purpose: By analyzing this dataset, we can understand how happiness levels vary among age groups, identifying potential patterns or trends.

2. education_level_and_suicide:

    - Description: This dataset includes information on suicide rates categorized by education levels. It may provide insights into whether there is a correlation between educational attainment and suicide.

    - Purpose: Analyzing this dataset can help uncover any relationship between education levels and suicide rates, contributing to our understanding of potential risk factors.

3. gender_happiness_percentage:

    - Description: This dataset compiles information on gender and happiness percentages. It provides insights into reported happiness levels categorized by gender, offering a focused perspective on the interplay between gender and happiness.

    - Purpose: This focused exploration contributes to a more refined examination of gender-specific factors affecting well-being.

4. suicide_gender_year:

- Description: This dataset includes suicide statistics categorized by gender and year. It will provide a temporal view of suicide rates with a gender-specific breakdown.

- Purpose: Analyzing trends over time can help identify any significant changes in suicide rates among different segments of the population, contributing to a comprehensive understanding of suicide dynamics to

5. why_suicide_month:

- Description: This dataset is likely focused on reasons behind suicides, with a specific emphasis on monthly variations. It may include information on the motivations or circumstances surrounding suicide cases each month.

- Purpose: By exploring this dataset, we can identify patterns or factors that might contribute to fluctuations in suicide rates on a monthly basis and provide insights into the temporal dynamics of suicide which is important to eventually reduce this phenomenon.

6. We also want to include data from the WHO, the Center for Disease Control and Prevention (CDC) and the American Foundation for Suicide Prevention (AFSP) depending on the relevance of the data and its availability.

Possible Research Questions

1. What are the major causes behind the observed patterns in suicide rates over the years?

2. Is there a correlation between the reasons for suicide and monthly variations in the number of cases?

3. How do happiness percentages correlate with suicide rates among different age groups?

4. What external factors, if any, contribute significantly to variations in suicide statistics?

5. Is there evidence to suggest that higher education levels are associated with lower suicide rates, and if so, what factors may contribute to this correlation?

By addressing these research questions, project aims to shed light on the relationship between suicide statistics, happiness levels, and potential contributing factors. Through thorough analysis, we intend to provide a comprehensive understanding of the complex dynamics surrounding mental health issues. Also if we have time we intend to integrate machine learning concepts into our project. That may allow us to find trends in the available data.

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