Midterm Project Proposal
MA678
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Background Information
Suicide is a major public health issue globally, affecting individuals across various
socio-economic backgrounds. It is a complex phenomenon that could potentially be linked to a
multitude of factors including economic conditions, societal norms, and individual
circumstances.

Data Introduction
The dataset at hand spans from 1985 to 2016 and aggregates data from multiple sources to
explore the factors correlated with suicide rates across different cohorts worldwide.
- Country: Analyzing suicide rates across various nations.
- Year & Age: Time and age group segmentation for trend analysis.
- Gender: To compare suicide rates between males and females.
- Generations: Grouped into "Generation X," "Silent," "Boomers," "Millennials," and
  "Generation Z."
- Socio-economic Indicators: HDI, GDP, and GNI provide context on living standards and
  economic health.
- Suicide Rate: The main variable, indicating the number of suicides per 100,000
  individuals.

By examining the suicide rates provided in the dataset, we can seek to understand the patterns
and risk factors associated with this issue.

Initial Questions
1. Does the suicide rate vary significantly between genders?
2. Does a change in a country's economic status (as indicated by GDP or GNI) cause a
   significant shift in its suicide rate? Can we detect a causal relationship amidst the various
   contributing factors?
3. Can we use these predictors to forecast suicide rates in different countries?

Data Sources
https://www.kaggle.com/datasets/russellyates88/suicide-rates-overview-1985-to-2016/data
https://hdr.undp.org/data-center/country-insights#/ranks
https://databank.worldbank.org/source/world-development-indicators
https://www.who.int/health-topics/suicide#tab=tab_1

Literature Review
Milner, A., et al. (2013). Social and economic determinants of suicide: an ecological analysis of
35 countries. Social Psychiatry and Psychiatric Epidemiology, 48(1), 19-27.
https://pubmed.ncbi.nlm.nih.gov/21079912/
Vijayakumar, L., et al. (2005). Suicide in developing countries (1): Frequency, distribution, and
association with socioeconomic indicators. Crisis.
https://pubmed.ncbi.nlm.nih.gov/16276752/