

Team members

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Research questions

Whether a trend can be found in the locations of attacks and a predictor for it
Whether there is a correlation between attack frequency and time

World Happiness Report (WHR) and Terrorism:

- Whether economic inequality is correlated with attack location
- Whether trust in government is correlated with attack location
- Whether GDP is a predictor for attack location and frequency

Hypotheses

We hypothesize based on total variance of latitude and longitude that there is no significant variance reduction for a model fit to latitude or longitude over time. A predictor generated from these may not be accurate.

There may be an increase in attack frequency over time, based on recent publicity.

The World Happiness Scores are dependent on the frequency/location of terrorist attacks.

Dataset

We will use the Global Terrorism Database dataset by the START Consortium on kaggle.¹ It has the following notable features:

- Date of the attack
- Specific location in country/region/province/city, latitude and longitude data
- Method of attack
- Specific information about the attacker and target (nationality, type (single, group))

Definition Terrorism according to the GTD:

1. The violent act was aimed at attaining a political, economic, religious, or social goal;
2. The violent act included evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims; and
3. The violent act was outside the precepts of International Humanitarian Law.

¹ <https://www.kaggle.com/START-UMD/gtd/version/3>

We will also use the World Happiness Report dataset by the Sustainable Development Solutions Network on kaggle². We will mostly use this dataset to see if there are noticeable correlations between the two datasets. Formulated in Research Questions what we will correlate.

Time planning

Week 1:

- Exploring the dataset and formulating sub questions and specified hypotheses

Week 2:

- Formulating method of analysis and its implementation (have results in data)

Week 3:

- Finish implementation and visualizing results (have results visualized)

Week 4 (ends Thursday):

- Writing presentation and eventual further research

Sources

<https://www.start.umd.edu/gtd/using-gtd/>

² <https://www.kaggle.com/unsdsn/world-happiness>