

Data Visualisation Final Assignment

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Tools used:

- Tableau for visualizations
- Illustrator
- After effects
- Openrefine
- Excel

Common used database for general statistics about terrorism: Global Terrorism Database (GTD) <https://www.start.umd.edu/gtd/access/>

1. Subtopic location and definition: Michelle van Dorth

a. Location of attack and location of attacker

These sources are Wikipedia pages which contain lists of terrorist attacks in the years 2018, 2019 and 2020. This data was used to create the visualization with arrows on the map.

- https://en.wikipedia.org/wiki/List_of_terrorist_incidents_in_2020
- https://en.wikipedia.org/wiki/List_of_terrorist_incidents_in_2019
- https://en.wikipedia.org/wiki/List_of_terrorist_incidents_in_2018

b. Heatmap of attacks

From this database, all locations of the listed terrorist attacks were plotted on a map in Tableau to create a heatmap of all the terrorist attacks. The variable nkill was used to create a filter for the colors of the points on the map.

- <https://www.start.umd.edu/data-tools/global-terrorism-database-gtd>

c. Definitions of terrorism

From this document, the definitions of terrorism were put into an excel document, from where they were transferred to Tableau. Finally, a word cloud was created which shows the frequency of words within these definitions.

- <https://dema.az.gov/sites/default/files/Publications/AR-Terrorism%20Definitions-BORUNDA.pdf>

2. Laws and security: Thomas

a. What type of (illegal) weapons were used in attacks

- <https://www.start.umd.edu/data-tools/global-terrorism-database-gtd>

This is the global terrorism database, registering all terrorist attacks since 1970. From this I extracted the type of weapon used in attacks.

b. Firearm rate per country

- i. <https://worldpopulationreview.com/countries/gun-ownership-by-country/#dataTable>

To see whether laws and security on firearms, I used the above database by World Population Review to view the firearm rate per country and the total amount of firearms present.

c. Preemptive measure and criminal justice per country

- i. <https://worldjusticeproject.org/our-work/research-and-data/wjp-rule-law-index-2020>

Next I reviewed the Rule of Law index by the World Justice Report, which gives the scores of how strict or well maintained certain factors in countries. From the 8 available categories I choose to look at Security and Order (preemptive to terrorism) and Criminal Justice (deterring terrorists).

3. Political beliefs / faith - Olivier

a. Number of Casualties and Incidents per Ideology

Data is sourced from report: Building and analyzing a comprehensive open source database on global terrorist events by Laura Dugan and Gary LaFree, their data was taken from the Global Terrorist Database (GTD) 2018. This report reported the number with which ideologies were involved with terrorism. The source for the percentage of terrorist groups with certain religious orientation came from following report: Correlates of terror: Trends in types of terrorist groups and fatalities inflicted, by Stephen Rowe, Roberto Phelps and Greg Simons, 2019

<https://www.tandfonline.com/doi/full/10.1080/23311886.2019.1584957>

b. Terrorist Groups and their ideology

The main datasource for this visualization was the global terrorist database (GTD) 2018, this was used for the amount of casualties and death related to certain terrorist groups. These terrorist groups were identified and their ideology was researched using wikipedia, this gave the ideological orientation of the top 7 terrorist groups.

c. Religion and terrorist attack worldwide

Lastly the amount of terrorist occurrences per country with certain religious orientation was visualized using a database from Pew 2017 - Religious Composition. This was combined with the global terrorist database (GTD) 2018 to result in the visualization.

<https://www.pewforum.org/2015/04/02/religious-projection-table/2010/percent/all/>

4. Media and perception - Robbert-Jan Berkenbos

- a. Via which medium are most attacks claimed per terrorist group?
 - i. Medium: GTD claimmode_txt
 - ii. Terrorist group: GTD gname
 - iii. Number of attacks: GTD eventid
- b. How safe do people feel in relation to how many attacks there are in their country?
 - i. Attacks from 2005-2014: GTD country_txt
 - ii. Worries for terrorist attack (results are from between 2010-2014: <http://www.worldvaluessurvey.org/WVSOnline.jsp>)
- c. Is there a pattern between the number of attacks and the number of search terms for attacks.
 - i. Searches for terrorism: <https://trends.google.com/trends/explore?date=all&geo=US&q=cancer.he%20disease.terrorism.suicide>
 - ii. Attacks from 2005-2014: <https://ourworldindata.org/terrorism>

5. Economy - Floris

- a. Deaths as result of terrorism against GDP per capita
 - i. GDP per capita for countries over the years: <https://ourworldindata.org/grapher/average-real-gdp-per-capita-across-countries-and-regions>
 - ii. Deaths: Global Terrorism Database (GTD)
- b. Deaths as result of terrorism against healthcare spending
 - i. Healthcare spending: <https://ourworldindata.org/grapher/health-expenditure-government-expenditure>
 - ii. Deaths: Global Terrorism Database (GTD)
- c. Nativity of extremist individuals against education spending
 - i. Education spending: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS>
 - ii. Extremist individuals: <https://www.start.umd.edu/data-tools/profiles-individual-radicalization-unit-ed-states-pirus> This was cut down to only give the amount of individuals for every nativity stated in the database using Openrefine.