Analysis of Terrorism Fatalities Across the World

Sharon and Catherine

2022-04-14

This project seeks to understand how terrorism has impacted the world.

To accomplish this project, we seek to address the following questions:  
1. How do terrorism fatalities compare across the world?  
2. Which countries have been most/least affected by terrorism? Has terrorism, in the top 5 most affected countries, reduced or increased over the years (2000-2017)?  
3. What is the impact of terrorism on countries most/least affected by terrorism? Is the impact positive or negative?  
4. What is the most prevalent type of terrorism?  
5. Which sectors and nationalities are highly targeted by terrorism activities?

# Exploratory Data Analysis (EDA)

## Load Packages and Import Data.

#Load necessary packages  
library(tidyverse)   
library(ggplot2)   
library(readr)   
library(dplyr)

#Import dataset containing terrorism fatalities  
terrorism\_fatalities <- readr::read\_csv("fatalities-from-terrorism.csv", show\_col\_types = FALSE)

#Display the first five rows of the imported dataset  
as\_tibble(terrorism\_fatalities)

## # A tibble: 3,661 x 4  
## Entity Code Year Fatalities  
## <chr> <chr> <dbl> <dbl>  
## 1 Afghanistan AFG 1973 0  
## 2 Afghanistan AFG 1979 53  
## 3 Afghanistan AFG 1987 0  
## 4 Afghanistan AFG 1988 128  
## 5 Afghanistan AFG 1989 10  
## 6 Afghanistan AFG 1990 12  
## 7 Afghanistan AFG 1991 68  
## 8 Afghanistan AFG 1992 49  
## 9 Afghanistan AFG 1994 22  
## 10 Afghanistan AFG 1995 5  
## # ... with 3,651 more rows

head(terrorism\_fatalities)

## # A tibble: 6 x 4  
## Entity Code Year Fatalities  
## <chr> <chr> <dbl> <dbl>  
## 1 Afghanistan AFG 1973 0  
## 2 Afghanistan AFG 1979 53  
## 3 Afghanistan AFG 1987 0  
## 4 Afghanistan AFG 1988 128  
## 5 Afghanistan AFG 1989 10  
## 6 Afghanistan AFG 1990 12

Check the number of rows and columns.

#Number of rows  
nrow(terrorism\_fatalities)

## [1] 3661

#Number of columns  
ncol(terrorism\_fatalities)

## [1] 4

Check if there are any missing values.

#Check for missing values  
#sum(is.na(terrorism\_fatalities))  
  
colSums(is.na(terrorism\_fatalities))

## Entity Code Year Fatalities   
## 0 0 0 0

The terrorism fatalities dataset has no missing values.

Check for unique values in the ‘Entity’ column.

#Unique values in the dataset  
unique(terrorism\_fatalities[c("Entity")])

## # A tibble: 188 x 1  
## Entity   
## <chr>   
## 1 Afghanistan   
## 2 Albania   
## 3 Algeria   
## 4 Angola   
## 5 Antigua and Barbuda  
## 6 Argentina   
## 7 Armenia   
## 8 Australia   
## 9 Austria   
## 10 Azerbaijan   
## # ... with 178 more rows

Rename ‘Entity’ column to ‘Country’.

terrorism\_fatalities <- terrorism\_fatalities %>%  
 rename(Country = Entity)

Summary statistics of the dataset.

summary\_stat <- terrorism\_fatalities %>%   
 group\_by(Country) %>%  
 summarise(  
 count = n(), #Number of rows   
 avg = mean(Fatalities),   
 minimum = min(Fatalities),  
 maximum = max(Fatalities)  
 ) %>%   
 arrange()  
summary\_stat

## # A tibble: 188 x 5  
## Country count avg minimum maximum  
## <chr> <int> <dbl> <dbl> <dbl>  
## 1 Afghanistan 32 1231. 0 6216  
## 2 Albania 18 2.33 0 26  
## 3 Algeria 31 357. 0 4266  
## 4 Angola 28 109. 0 846  
## 5 Antigua and Barbuda 1 0 0 0  
## 6 Argentina 40 12.2 0 123  
## 7 Armenia 14 2.64 0 15  
## 8 Australia 30 0.767 0 4  
## 9 Austria 33 0.909 0 6  
## 10 Azerbaijan 15 17.2 0 186  
## # ... with 178 more rows

# Data Transformation

### 1. How do terrorism fatalities compare across the world?

Compute the average terrorism rate for each country.

#Group by Country and find the terrorism rate for each country  
choropleth\_data <- terrorism\_fatalities %>%   
 group\_by(Country) %>%   
 summarise(Fatalities=mean(Fatalities))

Rename ‘Country’ column to ‘region’.

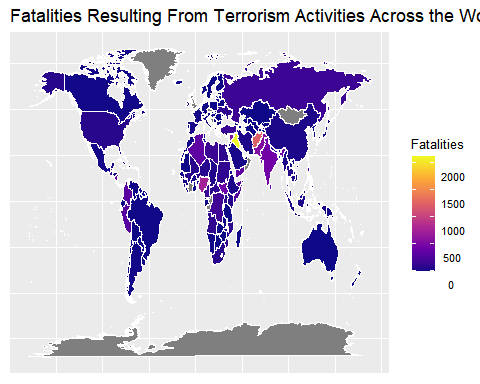
choropleth\_data <- choropleth\_data %>%  
 rename(region = Country)

Plot a choropleth map to show how terrorism compare across countries.

#Convert from tibble to dataframe  
choropleth\_data <- as.data.frame(choropleth\_data)  
  
#Data containing longitudes and latitudes to be used in mapping the data  
global\_map <- map\_data("world")  
  
#Merge the "world" map\_data to the terrorism\_fatalities dataset  
merged\_data <- left\_join(global\_map, choropleth\_data, by = "region")  
  
#Plot the map  
ggplot(merged\_data, aes(long, lat, label = region ,group = group))+  
 geom\_polygon(aes(fill = Fatalities), color = "white")+  
 ggtitle("Fatalities Resulting From Terrorism Activities Across the World")+  
 scale\_fill\_viridis\_c(option = "C")+  
 theme(#panel.background = element\_rect(fill = "white"),  
 #plot.background = element\_rect(fill = "white"),  
 axis.text.x = element\_blank(),  
 axis.text.y = element\_blank(),  
 axis.title.x = element\_blank(),  
 axis.title.y = element\_blank(),  
 axis.ticks = element\_blank(),  
 #rect = element\_blank(),  
 #panel.border = element\_blank(),  
 legend.title= element\_text(  
 hjust = 0.4 ,vjust=0.3, size=10,family = "Times"),  
 legend.text = element\_text(  
 hjust = 0.4 ,vjust=2, size=8,family = "Times"))

## Warning in grid.Call(C\_stringMetric, as.graphicsAnnot(x$label)): font family not  
## found in Windows font database  
  
## Warning in grid.Call(C\_stringMetric, as.graphicsAnnot(x$label)): font family not  
## found in Windows font database

## Warning in grid.Call(C\_textBounds, as.graphicsAnnot(x$label), x$x, x$y, : font  
## family not found in Windows font database  
  
## Warning in grid.Call(C\_textBounds, as.graphicsAnnot(x$label), x$x, x$y, : font  
## family not found in Windows font database



From the map above, we can compare the fatalities as a result terrorism across the globe. We can see that some regions in Africa and Asia have highly been affected by terrorism.

### 2. Which countries have been most/least affected by terrorism? Has terrorism, in the top 5 most affected countries, reduced or increased over the years (2000-2017)?

Reorder the dataset to check which countries have had the highest number of fatalities as a result of terrorism.

highest <- terrorism\_fatalities %>%   
 group\_by(Country) %>%  
 summarise(maximum = max(Fatalities)) %>%   
 arrange(desc(maximum)) #Ordering the values from the highest to the lowest  
  
highest

## # A tibble: 188 x 2  
## Country maximum  
## <chr> <dbl>  
## 1 Iraq 13965  
## 2 Nigeria 7781  
## 3 Afghanistan 6216  
## 4 Algeria 4266  
## 5 Syria 3924  
## 6 Nicaragua 3617  
## 7 USA 3008  
## 8 Pakistan 2875  
## 9 Peru 2467  
## 10 El Salvador 2383  
## # ... with 178 more rows

**Above, we can see that Iraq has had the highest number of fatalities resulting from terrorism, followed by Nigeria, Afghanistan, Algeria and Syria.**

The countries that have been least affected by terrorism.

lowest <- terrorism\_fatalities %>%   
 group\_by(Country) %>%  
 summarise(minimum = max(Fatalities)) %>%   
 arrange(minimum)   
  
lowest

## # A tibble: 188 x 2  
## Country minimum  
## <chr> <dbl>  
## 1 Antigua and Barbuda 0  
## 2 Benin 0  
## 3 Brunei 0  
## 4 Falkland Islands 0  
## 5 French Polynesia 0  
## 6 Iceland 0  
## 7 Luxembourg 0  
## 8 Martinique 0  
## 9 Mauritius 0  
## 10 Saint Kitts and Nevis 0  
## # ... with 178 more rows

**The five countries that have been least affected by terrorism are Antigua & Barbuda, Benin, Brunei, Falkland Islands and French Polynesia.**

The top five countries that have been most affected by terrorism.

highest\_terrorism <- highest %>%  
filter(maximum >= 3924)  
  
highest\_terrorism

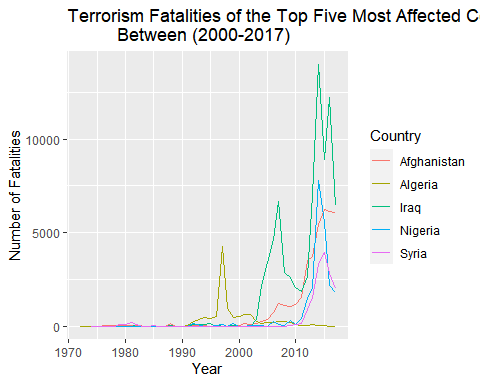
## # A tibble: 5 x 2  
## Country maximum  
## <chr> <dbl>  
## 1 Iraq 13965  
## 2 Nigeria 7781  
## 3 Afghanistan 6216  
## 4 Algeria 4266  
## 5 Syria 3924

**The top 5 most affected countries by terrorism are Iraq, Nigeria, Afghanistan, Algeria and Syria.**

terrorism\_high <- highest\_terrorism %>%  
 left\_join(terrorism\_fatalities, by = "Country")  
  
terrorism\_high

## # A tibble: 157 x 5  
## Country maximum Code Year Fatalities  
## <chr> <dbl> <chr> <dbl> <dbl>  
## 1 Iraq 13965 IRQ 1975 0  
## 2 Iraq 13965 IRQ 1976 12  
## 3 Iraq 13965 IRQ 1979 1  
## 4 Iraq 13965 IRQ 1980 8  
## 5 Iraq 13965 IRQ 1981 0  
## 6 Iraq 13965 IRQ 1982 96  
## 7 Iraq 13965 IRQ 1983 1  
## 8 Iraq 13965 IRQ 1984 0  
## 9 Iraq 13965 IRQ 1987 0  
## 10 Iraq 13965 IRQ 1988 43  
## # ... with 147 more rows

Visualize the trend in terrorism fatalities of the top 5 most affected countries between Years 2000 and 2017.



**From the chart above, we can see that the number of fatalities as a result of terrorism were on the rise over the years for the top five most affected countries, and they started declining towards 2017.**

### 3. What is the impact of terrorism on countries most/least affected by terrorism? Is the impact positive or negative?

To determine the impact of terrorism, we compared the life satisfaction and GDP Per Capita of the countries most affected by terrorism with the countries least affected by terrorism.

Load the dataset containing the GDP Per Capita and Life Satisfaction of each country.

#Import dataset containing life satisfaction and gdp of countries  
gdp\_happiness <- readr::read\_csv("gdp-vs-life-satisfaction.csv", show\_col\_types = FALSE)  
  
gdp\_happiness

## # A tibble: 5,126 x 7  
## Country Code Year Life\_Satisfaction GDP Population Continent  
## <chr> <chr> <dbl> <dbl> <dbl> <dbl> <chr>   
## 1 Afghanistan AFG 2008 3.72 1484. 27722281 <NA>   
## 2 Afghanistan AFG 2009 4.40 1759. 28394806 <NA>   
## 3 Afghanistan AFG 2010 4.76 1957. 29185511 <NA>   
## 4 Afghanistan AFG 2011 3.83 1905. 30117411 <NA>   
## 5 Afghanistan AFG 2012 3.78 2075. 31161378 <NA>   
## 6 Afghanistan AFG 2013 3.57 2116. 32269592 <NA>   
## 7 Afghanistan AFG 2014 3.13 2102. 33370803 <NA>   
## 8 Afghanistan AFG 2015 3.98 2068. 34413603 Asia   
## 9 Afghanistan AFG 2016 4.22 2057. 35383028 <NA>   
## 10 Afghanistan AFG 2017 2.66 2058. 36296111 <NA>   
## # ... with 5,116 more rows

Join ‘gdp\_happiness’ dataset with ‘terrorism\_fatalities’ dataset.

merged\_data <- gdp\_happiness %>%   
 full\_join(terrorism\_fatalities, by = "Country")  
  
merged\_data

## # A tibble: 67,215 x 10  
## Country Code.x Year.x Life\_Satisfaction GDP Population Continent Code.y  
## <chr> <chr> <dbl> <dbl> <dbl> <dbl> <chr> <chr>   
## 1 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 2 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 3 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 4 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 5 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 6 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 7 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 8 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 9 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## 10 Afghanistan AFG 2008 3.72 1484. 27722281 <NA> AFG   
## # ... with 67,205 more rows, and 2 more variables: Year.y <dbl>,  
## # Fatalities <dbl>

Compute the average life satisfaction, fatalities and GDP of each country.

average\_data <- merged\_data %>%   
 group\_by(Country) %>%   
 summarise(  
 average\_satisfaction = mean(Life\_Satisfaction, na.rm=TRUE),  
 average\_gdp = mean(GDP, na.rm=TRUE),  
 average\_fatalities = mean(Fatalities, na.rm=TRUE))  
  
average\_data

## # A tibble: 325 x 4  
## Country average\_satisfaction average\_gdp average\_fatalities  
## <chr> <dbl> <dbl> <dbl>  
## 1 Afghanistan 3.81 1704. 1231.   
## 2 Albania 4.99 9596. 2.33  
## 3 Algeria 5.56 10630. 357.   
## 4 American Samoa NaN NaN NaN   
## 5 Andorra NaN NaN NaN   
## 6 Angola 4.42 6888. 109.   
## 7 Anguilla NaN NaN NaN   
## 8 Antarctica NaN NaN NaN   
## 9 Antigua and Barbuda NaN 19165. 0   
## 10 Argentina 6.41 21374. 12.2   
## # ... with 315 more rows

The countries with the highest life satisfaction

high\_to\_low <- average\_data %>%   
 select(Country, average\_satisfaction) %>%  
 arrange(desc(average\_satisfaction)) #Ordering the values from the highest to the lowest  
  
high\_to\_low

## # A tibble: 325 x 2  
## Country average\_satisfaction  
## <chr> <dbl>  
## 1 Denmark 7.70  
## 2 Norway 7.56  
## 3 Switzerland 7.54  
## 4 Finland 7.52  
## 5 Netherlands 7.47  
## 6 Canada 7.44  
## 7 Iceland 7.41  
## 8 Sweden 7.37  
## 9 New Zealand 7.32  
## 10 Australia 7.31  
## # ... with 315 more rows

**Denmark has had the highest average life satisfaction then Norway and Switzerland. The countries most affected by terrorism do not appear in the list of countries with high average life satisfaction.**

Filter top five most affected and least affected countries by terrorism?

countries\_ranked <- highest %>%  
 select(Country, maximum) %>%   
 filter(Country %in% c("Iraq", "Nigeria", "Afghanistan", "Algeria", "Syria",   
 "Benin", "Iceland", "Mauritius", "Brunei", "Seychelles"))  
  
countries\_ranked

## # A tibble: 10 x 2  
## Country maximum  
## <chr> <dbl>  
## 1 Iraq 13965  
## 2 Nigeria 7781  
## 3 Afghanistan 6216  
## 4 Algeria 4266  
## 5 Syria 3924  
## 6 Benin 0  
## 7 Brunei 0  
## 8 Iceland 0  
## 9 Mauritius 0  
## 10 Seychelles 0

joined\_data <- countries\_ranked %>%   
 left\_join(merged\_data, by = "Country")  
  
joined\_data

## # A tibble: 3,078 x 11  
## Country maximum Code.x Year.x Life\_Satisfaction GDP Population Continent  
## <chr> <dbl> <chr> <dbl> <dbl> <dbl> <dbl> <chr>   
## 1 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 2 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 3 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 4 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 5 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 6 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 7 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 8 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 9 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## 10 Iraq 13965 IRQ 2008 4.59 8333. 28385739 <NA>   
## # ... with 3,068 more rows, and 3 more variables: Code.y <chr>, Year.y <dbl>,  
## # Fatalities <dbl>

comparison\_data <- joined\_data %>%  
 group\_by(Country) %>%   
 summarise(  
 avg\_satisfaction = mean(Life\_Satisfaction, na.rm = TRUE),  
 avg\_fatalities = mean(Fatalities, na.rm = TRUE),  
 avg\_gdp = mean(GDP, na.rm = TRUE))  
comparison\_data

## # A tibble: 10 x 4  
## Country avg\_satisfaction avg\_fatalities avg\_gdp  
## <chr> <dbl> <dbl> <dbl>  
## 1 Afghanistan 3.81 1231. 1704.  
## 2 Algeria 5.56 357. 10630.  
## 3 Benin 3.71 0 2727.  
## 4 Brunei NaN 0 67884.  
## 5 Iceland 7.41 0 48644.  
## 6 Iraq 4.64 2124. 8873.  
## 7 Mauritius 5.73 0 16068.  
## 8 Nigeria 5.01 756. 4472.  
## 9 Seychelles NaN 0 21400.  
## 10 Syria 4.02 564. NaN

The country with the highest average life satisfaction, Denmark, had a value of 7.695750. On the other hand, the top 5 countries that have had high terrorism fatalities, have average life satisfaction values ranging from 5.555167-3.806700.This implies that the aforesaid countries have low life satisfaction.

#import library gridExtra to help in joining the plots  
library(gridExtra)

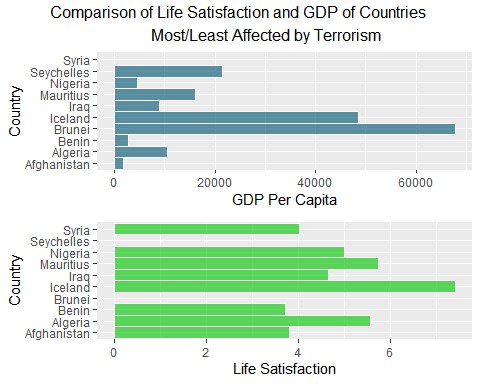
##   
## Attaching package: 'gridExtra'

## The following object is masked from 'package:dplyr':  
##   
## combine

#fatalities\_plot <- comparison\_data %>%   
 #ggplot(mapping = aes(x = avg\_fatalities, y = Country))+  
 #geom\_bar(stat="identity", width=1, color="white",  
 #fill=rgb(0.8,0.4,0.1,0.7))+  
 #xlab("Number of Fatalities")  
  
satisfaction\_plot <- comparison\_data %>%   
 ggplot(mapping = aes(x = avg\_satisfaction, y = Country))+  
 geom\_bar(stat="identity", width=1, color="white",  
 fill=rgb(0.1,0.8,0.1,0.7))+  
 xlab("Life Satisfaction")  
   
gdp\_plot <- comparison\_data %>%   
 ggplot(mapping = aes(x = avg\_gdp, y = Country))+  
 geom\_bar(stat="identity", width=1, color="white",  
 fill=rgb(0.1,0.4,0.5,0.7))+  
 xlab("GDP Per Capita")  
   
# Use grid.arrange to put plots in columns  
grid.arrange(gdp\_plot,satisfaction\_plot, nrow = 2,   
 top = "Comparison of Life Satisfaction and GDP of Countries   
 Most/Least Affected by Terrorism")

## Warning: Removed 1 rows containing missing values (position\_stack).

## Warning: Removed 2 rows containing missing values (position\_stack).



We can tell from the chart above that the countries that were **least affected by terrorism (Iceland, Mauritius, Brunei and Seychelles) have high GDP per capita** compared to the countries that were most affected by terrorism. Afghanistan, Iraq and Nigeria have low GDP per capita. More so, countries **least affected by terrorism (Iceland and Mauritius) have higher life satisfaction** compared to countries most affected by terrorism. Therefore, from the outcome above, we can infer that presence of terrorism activities has a negative impact on countries.

### 4. What is the most prevalent type of terrorism?

#Import dataset containing the types of terrorism  
types\_of\_terrorism <- readr::read\_csv("types-of-terrorism.csv", show\_col\_types = FALSE)  
  
types\_of\_terrorism

## # A tibble: 201,183 x 5  
## Year Country terrorism\_type targeted\_sectors targeted\_nation~  
## <dbl> <chr> <chr> <chr> <chr>   
## 1 1970 Dominican Republic Assassination Private Citizen~ Dominican Repub~  
## 2 1970 Mexico Hostage Taking (K~ Government (Dip~ Belgium   
## 3 1970 Philippines Assassination Journalists & M~ United States   
## 4 1970 Greece Bombing/Explosion Government (Dip~ United States   
## 5 1970 Japan Facility/Infrastr~ Government (Dip~ United States   
## 6 1970 United States Armed Assault Police United States   
## 7 1970 Uruguay Assassination Police Uruguay   
## 8 1970 United States Bombing/Explosion Utilities United States   
## 9 1970 United States Facility/Infrastr~ Military United States   
## 10 1970 United States Facility/Infrastr~ Government (Gen~ United States   
## # ... with 201,173 more rows

#Unique values in the dataset  
unique(types\_of\_terrorism[c("terrorism\_type")])

## # A tibble: 9 x 1  
## terrorism\_type   
## <chr>   
## 1 Assassination   
## 2 Hostage Taking (Kidnapping)   
## 3 Bombing/Explosion   
## 4 Facility/Infrastructure Attack   
## 5 Armed Assault   
## 6 Hijacking   
## 7 Unknown   
## 8 Unarmed Assault   
## 9 Hostage Taking (Barricade Incident)

There are nine major types of terrorism as shown above.

rank\_terrorism <- types\_of\_terrorism %>%  
 group\_by(terrorism\_type) %>%   
 summarise(rank\_terrorism = n())%>%   
 arrange(desc(rank\_terrorism))  
  
rank\_terrorism

## # A tibble: 9 x 2  
## terrorism\_type rank\_terrorism  
## <chr> <int>  
## 1 Bombing/Explosion 95402  
## 2 Armed Assault 47419  
## 3 Assassination 20897  
## 4 Hostage Taking (Kidnapping) 13198  
## 5 Facility/Infrastructure Attack 11636  
## 6 Unknown 9590  
## 7 Unarmed Assault 1183  
## 8 Hostage Taking (Barricade Incident) 1124  
## 9 Hijacking 734

\*\* Bombing/Explosion has been the most prevalent type of terrorism

### 5. Which sectors and nationalities are highly targeted by terrorism activities?

rank\_sector <- types\_of\_terrorism %>%  
 group\_by(targeted\_sectors) %>%   
 summarise(rank\_sector = n())%>%   
 arrange(desc(rank\_sector))  
  
rank\_sector

## # A tibble: 22 x 2  
## targeted\_sectors rank\_sector  
## <chr> <int>  
## 1 Private Citizens & Property 49495  
## 2 Military 31998  
## 3 Police 27273  
## 4 Government (General) 23174  
## 5 Business 21797  
## 6 Transportation 7075  
## 7 Unknown 6815  
## 8 Utilities 6232  
## 9 Religious Figures/Institutions 4917  
## 10 Educational Institution 4658  
## # ... with 12 more rows

The top five sectors that have been a target of terrorism activities are private citizens, military, police, government and business respectively.

rank\_nationalities <- types\_of\_terrorism %>%  
 group\_by(targeted\_nationalities) %>%   
 summarise(rank\_nationalities = n())%>%   
 arrange(desc(rank\_nationalities))  
  
rank\_nationalities

## # A tibble: 216 x 2  
## targeted\_nationalities rank\_nationalities  
## <chr> <int>  
## 1 Iraq 26203  
## 2 Pakistan 14733  
## 3 Afghanistan 14247  
## 4 India 13622  
## 5 Colombia 8353  
## 6 Philippines 7752  
## 7 Peru 5853  
## 8 United States 5269  
## 9 Yemen 5227  
## 10 El Salvador 5212  
## # ... with 206 more rows

The top five nationalities that have been a target of terrorism activities are Iraq, Pakistan, Afghanistan, India and Columbia.

# Conclusion

From the analysis above, it is evident that Asian countries (i.e Iraq, Afghanistan, Syria and Pakistan) have mostly been affected by terrorism. More so, we can infer that the presence of terrorism activities has had a negative impact, not only on the countries in general (i.e the GDP Per Capita of the countries), but also on the wellbeing of the citizens (i.e Life Satisfaction) belonging to those countries.