Terrorist Attacks in Relation to the Top 10 Tourist Countries

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Introduction

- What is Terrorism?
- The impact on tourism destinations
  - Results: Jobless, homeless, deprivation
  - Mentality of traveler is affected by past danger
  - The effect on society?
    - Costs of flying, increase in cost in hospitality services to accommodate safety
    - Tourism, a source of revenue for developing countries
  - Goal?
    - Minimize fear in travelers
    - Minimize number of terrorist attacks in future

Background Summary

Although terrorism and tourism have been studied extensively, it still remains a global issue and may cause damage to a whole country or economic status. Authors like Alexandros Paraskevas and Sevil F. Sonmez have stated that terrorism is inescapable. It’s not a matter of if terrorists will attack anymore but a matter of how and when. Tourist areas are subtle targets for such attacks. With that being said, the countries have to find a way to incorporate safety management for the travelers and safety and functionality of the country.

In a another viewpoint, Z. Ismail and G. Feichtinger agree that terrorists are attracted to major cities and countries, but forecasting these events can be unpredictable, not to say that predictions cannot be made. Terrorism and tourism follow a cyclical pattern in terms of attraction, revenue, and destruction. In this pattern, there exist many uncertainties beyond the attacks that we cannot control.

In our research, we try to apply these concepts to better understand the attack trend, the attack type/target type, the terrorist network, and so on. Also, we will use time series models to do some predictions on terrorist events.

Methods

All of the data was taken from START’s Global Terrorism Database (GTD) and was filtered down by place, year, number of incidents, fatalities, and wounds, group type, target type, and attack type in two different trials.  
2. Filtered data by UNWTO’s (United Nation World Tourism Organization) list of the Top 10 Visited Countries in 2011.

- Data collection from 1970-2011
- Filtered further by Target Type: Tourists
  - Of the 17,159 attacks, only 61 of those targets were tourists and were sub-grouped by Attack Types in 2 trials: Countries & Group types
- Data Analysis with charts and network graphs to observe trends and extraneous factors
- Gathered tables for specific info analysis through Minitab program
  - Generate mathematic regression models for future predictions

Data Results

From the Incidents aspect, we find the following results:

- The terror network of the ten countries discovers the following diagram:
  - Data are the terrorist groups.
  - From the graph we can see for each country there exists several groups that just attack that country, while a few groups will attack several countries.

In terms of Fatalities, our results are:

- The bubble graph to the left represents the average amount of attacks on each country/year
- Bubble is colored
- The size of the bubble represents percentage of total attacks overall
- Trends consistent throughout

From the perspective of attack types the interesting findings are:

- The Column graph to the left shows the breakdown of number of attacks types for each different target type
- The graph on the right shows the breakdown of number of attacks types for each different country

References