



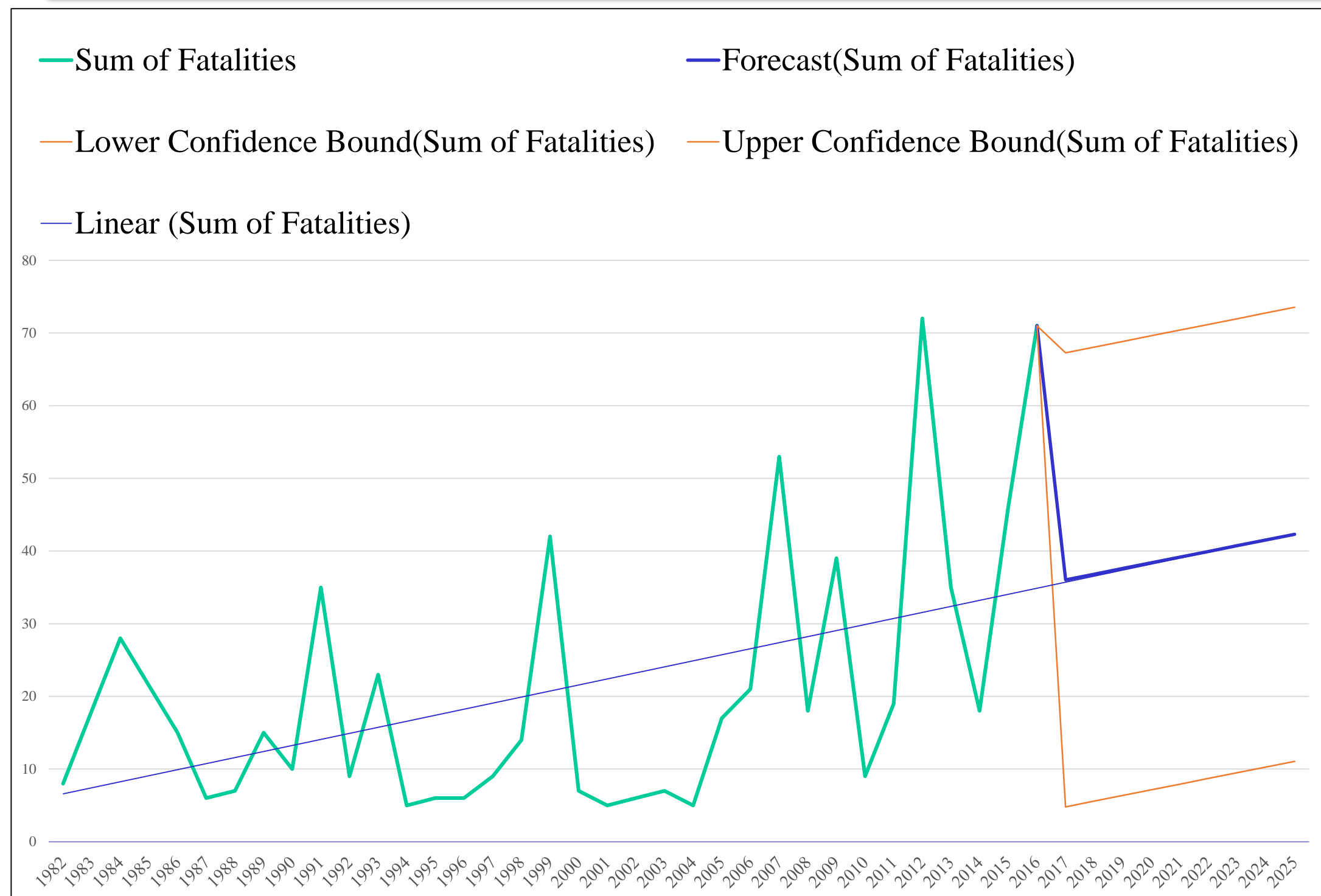
# Does Unemployment Influence Mass Shootings on the USA

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## Mass Shooting & Unemployment

Mass shootings is now one of the primary concerns in the United States of America. This research shows the correlation between unemployment and mass shootings events in the USA. Mass shootings data was collected from Gun violence Archive website. Historical unemployment data of the USA was retrieved from US Bureau of Labor Statistics The study analyzes if unemployment has any influence on mass shooting in the USA.

## Data Analysis



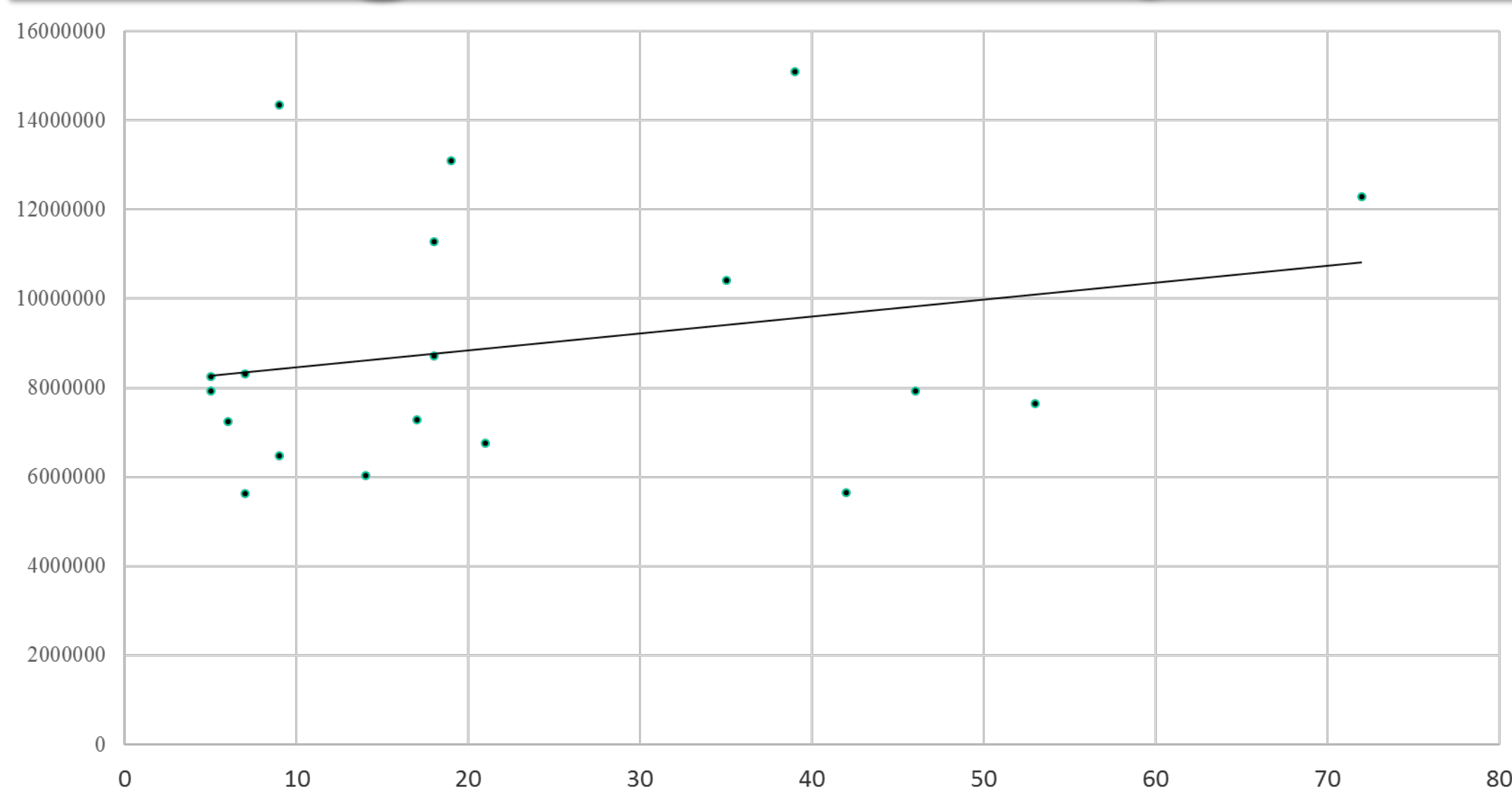
**Figure 1 – Forecasting Mass Shootings**

- 3 categories of data were collected - Mass Shootings in 2015 of Children & People (killed and injured)
- Forecast shows an increase in fatalities based on the data from 1996 to 2015
- Predicted value of Fatalities is 36 (as of January'17, 6 people are already killed in mass shooting)
- The maximum number of children killed in March (39) and people killed in August (45) 2015

yr+1	0.24	yr-1	0.24
yr+2	0.37	yr-2	0.39
yr+3	0.58	yr-3	0.35
yr+4	0.51	yr-4	0.39
yr+5	0.29	yr-5	0.07

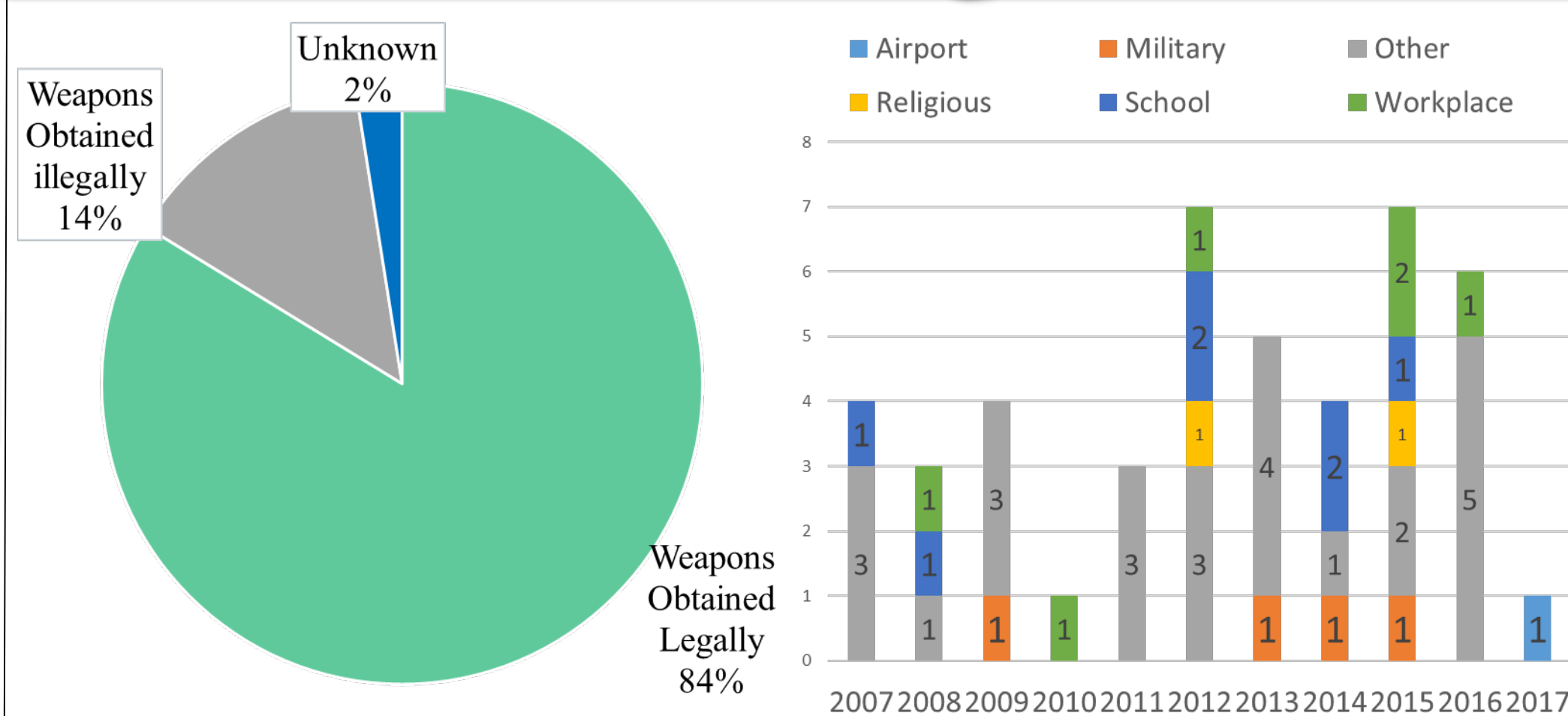
**Figure 2 – Granger Casualty Analysis of Sum of Fatalities and Unemployed Population(1996-2015)**

## Regression Analysis



**Figure 3 – 25% Correlation between Sum of Fatalities & Unemployed People**

## Findings



**Figure 4 – Key Findings about Weapons and Venue**

- Maximum mass shooting occurred in Texas & California
- In 84% cases, legally obtained handguns were used by mass shooters
- 57% victims are known to mass shooters and 43% are strangers
- 44% cases mass shootings happen in religious places
- White (56%) and Black (17%) males are mostly killed by mass shooters
- 56% cases prior signs of mental illness are identified

## Future Direction

This study includes data analysis using statistical tools from different software. Further study is needed for revealing the motives of mass shooters, the specific months when the occurrences of mass shootings increased, and the target areas based on states and venues. Additionally, historical mass shootings data based on Zip code and number of legal gun holders can be studied for predicting any recurrence of mass shootings.

## Reference

- Anderson, D. (2016, July 21). 10 Reasons U.S. has so Many Mass Shootings. Retrieved January 31, 2017, from <http://www.listland.com/10-reasons-u-s-many-mass-shootings/>
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- Ghose, Tia. "The Psychology of Mass Shootings." LiveScience. Purch, 19 Dec. 2012. Web. 03 Feb. 2017. <http://www.livescience.com/25666-mass-shooting-psychology.html>