**Research Proposal: The Relationship between Mental Illness and Active/Mass Shootings**

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Assignment Due Date

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**Introduction**

Active and mass shootings are increasingly being witnessed in the United States. The term active as used by the FBI is used to refer to the possibility of intervention and influence on the outcome by citizens and law enforcement officers during a shooting attack (FBI, n.d.). There is a consensus of the definition of active shooter among government agencies. It refers to an incident where a shooter is randomly killing or attempting to kill people in a confined or public area (Smart & Schell, 2021). The term mass shooting, however, lacks a standard definition. As Smart and Schell (2021) observe, different sources of data have various ways of measuring and designating particular shootings as mass shootings. In a bid to facilitate classification and profiling, the FBI defined a mass murderer as an individual who murders four or more people in a single instance and usually in the same location (Smart & Schell, 2021). Therefore, since the definition of active shooting is silent about the number of fatalities, some incidents of mass murder are encompassed in the definition of active shooting. Duwe (2019) notes that mass and active shootings constitute a relatively small proportion of all the gun crimes reported in the US. Nevertheless, the individual and communal impact that these shooting incidents have, such as loss of life, incapacitation, and anxiety together with the unpredictable nature of their occurrence makes them a national concern for the US.

This study investigates the relationship between active/mass shooting crimes and the mental health of the perpetrator. The study hypothesizes that mental illness such as bipolar disorder, schizophrenia, and major depressive syndrome increases the risk of an individual’s perpetration of active/mass shootings. The null and alternative hypotheses are as follows:

*H0*: Mental illness does not increase the risk of an individual’s perpetration of active/mass shootings.

*H1*: Mental illness increases the risk of an individual’s perpetration of active/mass shootings.

**Literature Review**

Mass and active shooting incidents have been on the rise in the US. According to Sergent (2021), mass shootings in the US rose almost by half in 2020 from the previous year’s 417 to 611. In 2019, the FBI classified 30 shootings as active shootings (FBI, 2019). This was an 11 percent rise from the number of shootings designated in 2018. The first quarter of 2021 has seen the highest number of mass shooting incidents on average compared to similar periods in the last four years (Sergent, 2021). Calls for an appropriate response and lasting solution to the escalating situation have been mounting. In essence, such shootings have been reported to take place in a variety of public places across the nation such that it has become necessary to prepare the public for their random occurrence. The FBI identifies the need for the collaborative efforts of public and private entities such as schools, communities, places of worship, transportation centers, and other sites of public gathering, all of which have been venues of gun violence, in averting the incidence and damage caused by active shooters (FBI, n.d). To enhance these efforts, the bureau has undertaken a mass awareness campaign. The Run Hide Fight campaign is intended to empower the public to respond aptly and increase their chances of survival during an active shooting attack (FBI, n.d). Also important have been the efforts to carry out threat assessments and threat management activities for the detection and prevention of possible violent intent by individuals.

The state of mental health has been one of the areas where the focus has been directed in the undertaking of active/mass shooting threat assessments. McGinty et al. (2014) note that news media sources and the public in general often associate public shootings with serious mental conditions. This has been the case in certain instances. Nevertheless, Ahonen et al. (2017) found that the risk of engaging in violence that is attributable to mental illness is minimal. A disproportionate emphasis has however seemed to be placed on providing mental health solutions for active/mass shootings. Hirschtritt and Binder (2018) note that policymakers and the public have also often directed the blame of the surge in shootings incidents to the presence of untreated severe mental ailments such as bipolar disorder and major depressive disorder in society. Metzl and Macleish (2015) advance that a more complex relationship between gun violence and mental illness exists, one that necessitates a departure from focusing policy solutions and public opinion solely on mental illness and psychiatric solutions to incorporate larger societal and structural interventions. Violence and mental ailments are however not without connection. According to Yakeley (2010), individuals with mental illness who do not receive the necessary medical care are at heightened risk of perpetrating violent acts. In their study, Bonanno and Levenson (2014) also identify the role of mental instability in contributing to the identification of shooters in school shooting incidents. The role of mental health in active/mass shootings can therefore not be overlooked.

**Method**

This study obtained data from the active shooter resources of the Federal Bureau of Investigations (FBI). Since the year 2000, the FBI has maintained a database of the annual occurrences of active shootings in the US. These annual reports released by the bureau highlight the tally of incidents, the date and location of the shootings, description of the shooter(s) as well as their fate after the incident, and the number of civilian and police casualties (FBI, 2018). The data is intended to inform the prevention, preparation, response, and recovery of federal, state, and local law enforcement agencies regarding active shootings (FBI, 2019).

**Procedure**

Active shooting incidents that occurred in the country between 2015 and 2019 as reported by the FBI were reviewed. For each of these years, the total number of active shooting incidents was obtained and for each occurrence, background searches of the perpetrators were carried out to identify any pre-existing mental health conditions that could be linked to their actions. The state of the mental health of the perpetrators is not always provided in the FBI reports. Where information gaps were identified, the FBI data on active shooting incidents was augmented with this data from credible media reports and databases of organizations that collect data on gun violence in the US such as Mother Jones to build profiles of the mental health of the shooters based on pre-shooting behavior or diagnosis.

**Sample**

The sample of the study was the 127 active shooting incidents reported by the FBI within the 5-year period, 2015 to 2019. The decision to use this sample was informed by the recency of the incidents hence ready availability of data in news media and other sources needed to develop the mental health profiles of the shooters.

**Design `**

The study adopted a quantitative design to analyze and interpret the acquired data sample data on active shooting incidents. Regression analysis was used. The frequency of identification of mental illness among the perpetrators of active shootings per year constituted the independent variable while the total number of active shooting incidents per year constituted the dependent variable. The excel program was used to conduct the regression analysis.

**Results**

Over the span of 5 years extending from 2015 to 2019, there were 127 active shooting incidents recorded by the FBI. A total of 35 perpetrators involved in these incidents (equivalent to 27. 6 percent) were found to have been suffering from a form of mental ailment. Table 1 summarizes the analysis of the five years included in the sample together with their respective records of active shooting incidents and offenders identified as having a past of mental health illness. In 2015, a total of 20 active shooting incidents were recorded. 35 percent of these shootings were carried out by an individual with mental illness. In 2016, a similar number of gun violence incidents were designated by the FBI as active shooting incidents and out of these, 25 percent of perpetrators had a history of mental illness. 30 active shooting incidents were recorded in 2017 and 33.3 percent of the culprits involved were flagged for mental illness. A similar proportion of perpetrators in 2018 were identified to have been suffering from some form of mental illness out of 27 shooting incidents that year. In 2019, a much smaller proportion of the 30 incidents reported by the FBI was identified as suffering from mental illness. At a significance level of 0.05, output from regression analysis yielded a p-value that was not statistically significant (P= 0.66) for the dependent variable.

**Discussion**

**Interpretation of Results**

This study investigated mental illness as a driving factor for the perpetration of active shootings within the US using data sourced from the FBI. The study confirmed the existence of strong evidence for the null hypothesis given the sample data. Consequently, the null hypothesis that mental illness does not increase the risk of individuals committing the crime of active shootings was not rejected. It brings out the observation that, contrary to widely held misconceptions, mental illness is not an inherent characteristic of perpetrators of active shootings. This finding echoes the research of Metzl and Macleish (2015) who found the existence of little evidence to associate individuals diagnosed with mental illness with an increased risk to commit gun crimes. In their findings, Metzl and Macleish (2015) found that only 3-5 percent of all crimes in the US involved individuals with a mental illness. The proportion of gun-related crimes involving people without any form of mental illness by far surpassed the average number of mentally ill persons implicated in a crime.

This study also indirectly implicates a wide array of factors beyond psychological conditions that collectively act as an influence on the execution of active shootings. Hirschtritt and Binder (2018) note that mental illness is only one among many individual characteristics that predispose people to the perpetration of gun violence. Some of these characteristics include a history of violence, affiliation with gangs, as well as drug use (Hirschtritt & Binder, 2018). Moreover, Ahonen et al. (2017) advance that conduct disorder during adolescence or late childhood happens to be a better predictor of violence than mental disorder later on in life. By providing crucial insights on one of the most common aspects of profiling and analyzing the motivations and characteristics of active shooters, this study reveals the need for an all-rounded assessment of potential threats of active shooting with possible extension to gun violence in general. Metzl et al. (2021) agree that more than the singular focus on individual behavior and propensity to crime, an analysis of larger social and cultural structures is needed. This enables the creation of policies and programs that are effective at averting the unfortunate and devastating incidents of gun violence in th American society.

**Ethical Concerns**

This study has no ethical concerns to report. The sources of data were secondary and readily available in the public domain.

**Limitations of Study**

This research study was limited in several ways. There was a general lack of comprehensiveness in the reports of active shooting incidents reported by the FBI and other government agencies. In particular, there was little to no official mention of the perpetrators’ state of mental health. This inadequacy necessitated the inclusion of open-source data and information provided by news media outlets as sources of data on the frequency of mental health illness among the culprits of active shootings. Further, this study was limited by its focus on reported mental health illness which meant exclusion of other pre-attack psychological and social factors that may be at play in the person and environment of the shooter causing their violent actions. The absence of comprehensive data on the characteristics of the offenders also meant that mental illness could only be properly analyzed as a general category rather than being broken down into multiple types of mental illnesses. The duration of focus also limited the sample size and consequently affected the accuracy of the results.

**Suggestions for Future Research**

Additional research in this area in the future is worthwhile. Such research could aim to better the current one by addressing a broad range of psychological factors other than history and diagnosis of mental illness, for instance, drug and substance abuse. Psychosocial and environmental factors could also provide useful insights into the relationships, behaviors, and motivations that aggravate the propensity of individuals to gun violence. This scope of individual and contextual factors could for instance incorporate the political ideology, racist and other discriminative tendencies, as well as other critical features in order to introduce greater comprehensiveness into the analysis. Future studies could also consider incorporating a larger sample size to enhance the accuracy and generalizability of findings.

**Figures and Tables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Total No. of Active Shooting Incidents** | **No. of Incidents in which Shooters were identified as having some form of mental illness** | **Percentage** |
| 2015 | 20 | 7 | 35% |
| 2016 | 20 | 5 | 25% |
| 2017 | 30 | 10 | 33.3% |
| 2018 | 27 | 9 | 33.3% |
| 2019 | 30 | 4 | 13.3% |

Table 1: Summary of total active/mass shooting incidents and the tally and proportion of incidents where culprits had a history of mental illness

|  | Coefficient B | Standard error | p-Value | Odds Ratio | 95% conf. interval |
| --- | --- | --- | --- | --- | --- |
|  | -0.18 | 0.41 | 0.66 | 0.84 | 0.37 - 1.87 |
|  | 0.85 | 2.96 | 0.77 | 2.35 |  |

Table 2: Regression analysis output summary

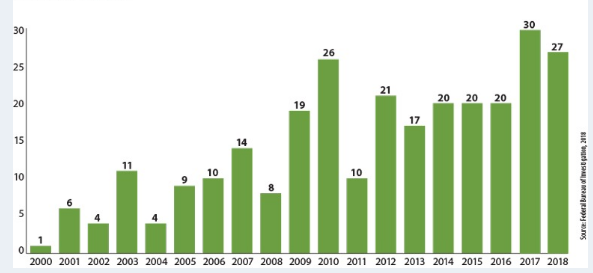


Figure 1: The number of active shooter incidents in the United States as recorded by the FBI from 2000 to 2018

References

Ahonen, L., Loeber, R., & Brent, D. A. (2017). The association between serious mental health problems and violence: Some common assumptions and misconceptions. *Trauma, Violence, & Abuse*, *20*(5), 613-625. <https://doi.org/10.1177/1524838017726423>

Bonanno, C. M., & Levenson, R. L. (2014). School shooters. *SAGE Open*, *4*(1), 215824401452542. <https://doi.org/10.1177/2158244014525425>

Duwe, G. (2019). Patterns and prevalence of lethal mass violence. *Criminology & Public Policy*, *19*(1), 17-35. <https://doi.org/10.1111/1745-9133.12478>

FBI. (n.d.). *Active shooter resources*. <https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-resources>

FBI. (2015). Active shooter incidents in the United States in 2014 and 2015. https://www.fbi.gov/file-repository/activeshooterincidentsus\_2014-2015.pdf/view

FBI. (2016). Active shooter resources. Federal Bureau of Investigation. https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-resources

FBI. (2018). Active shooter incidents in the united states in 2016 and 2017. https://www.fbi.gov/file-repository/active-shooter-incidents-us-2016-2017.pdf/view

FBI. (2019). Active shooter incidents in the United States in 2019. https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2019-042820.pdf/view

Hirschtritt, M. E., & Binder, R. L. (2018). A reassessment of blaming mass shootings on mental illness. *JAMA Psychiatry*, *75*(4), 311. <https://doi.org/10.1001/jamapsychiatry.2018.0010>

McGinty, E. E., Webster, D. W., Jarlenski, M., & Barry, C. L. (2014). News media framing of serious mental illness and gun violence in the United States, 1997-2012. *American Journal of Public Health*, *104*(3), 406-413. <https://doi.org/10.2105/ajph.2013.301557>

Metzl, J. M., & MacLeish, K. T. (2015). Mental illness, mass shootings, and the politics of American firearms. *American Journal of Public Health*, *105*(2), 240-249. <https://doi.org/10.2105/ajph.2014.302242>

Metzl, J. M., Piemonte, J., & McKay, T. (2021). Mental illness, mass shootings, and the future of psychiatric research into American gun violence. *Harvard Review of Psychiatry*, *29*(1), 81-89. <https://doi.org/10.1097/hrp.0000000000000280>

Sergent, J. (2021, March 23). *Boulder grocery store rampage follows spike in mass shootings during 2020*. USA Today. <https://www.usatoday.com/in-depth/news/2021/03/23/boulder-shooting-follows-spike-gun-violence-during-2020/6965360002/>

Smart R., & Schell, T. L. (2021). *Mass shootings: Definitions and trends*. RAND Corporation. <https://www.rand.org/research/gun-policy/analysis/essays/mass-shootings.html>

Yakeley, J. (2010). Violence, mental illness and personality disorder. *Working with Violence*, 26-40. <https://doi.org/10.1007/978-0-230-36446-2_3>