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Summary of Research on Mass Murder

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1. Introduction

This paper provides a brief review of the research literature available on the subject of mass murder. That literature is not extensive but does cover a wide range of related topics including; historical reviews, individual and grouped case studies, psychological autopsies of mass murderers, information on preventing some forms of mass shootings, especially school related, and some discussions of gun policies. The goals of this paper are to examine that literature, address what steps might be taken toward preventing these incidents in a particular community, and provide a foundation for further discussion and planning.

2. Definition of Mass Murder

Although precise definitions can be awkward, researchers have attempted to distinguish between categories of murder in order to identify factors that might help understand differences in patterns of events, causal factors and issues relating to appropriate response and prevention. Mass murder has been distinguished from common murders of individuals, serial murder involving multiple separate and distinct events, and spree murders involving multiple victims in separate places occurring in a sequence or spree. Mass murder has also generally been distinguished from politically motivated mass killings involving war, genocide or political unrest or repression.

Mass murder generally involves the murder of three or more victims, occurring in one location at approximately the same time, as a single episodic act. Mass murderers also distinguish themselves from other killers in that they often do not seek to avoid detection once an event has been initiated and they generally do not seek to evade arrest, instead

they are most likely to die during the event as a result of suicide or being killed by another during the incident.

3. Mass Murder Trends

Mass murder has been somewhat common in the United States and more unusual but not rare in other parts of the world. In April of this year, the month in which Jiverly Wong killed 13 people and himself in Binghamton, New York a total of 53 people died as a result of mass murder in the United States. Although some have argued that the incidence of mass murder has been increasing the data do not appear to support that assertion. In one count a researcher has identified 649 incidents of mass murder in the US from 1976 through 1999. Historical research identified an additional 260 incidents from 1909 to 1976. These include “waves” of mass murder in the 1920s and 1930s as well as one in the 1960s.

While the incidence of mass murder does not appear to have increased, the lethality of events has grown. More than half of the deadliest incidents of mass murder have occurred since 1980. Among the deadliest was a 1990 nightclub fire which killed 87. The deadliest school attack occurred in 1927 in Bath Michigan when bombs killed 45 and injured 58. The deadliest campus shooting occurred at Virginia Tech in April, 2007 and resulted in 33 deaths. The increase in lethality as measured by the number of victims per event has largely been attributed to increased firepower and more specifically increasingly powerful guns. In Binghamton, Wong fired 98 shots from two semi-automatic guns. Additional ammunition clips and a laser sight were found at the scene.

There is some evidence that mass murders have occurred in clusters or waves. Such waves have been reported in the 1920s, 1930s, 1980s and 1990s and also with a cluster of school related shootings in the late 1990s around the school massacre at Columbine. The literature speaks of a probable contagion effect in which the actions of some perpetrators may be triggered by reports of other events. Such links have been seen in school and workplace shootings.

4. Types of Mass Murders

To increase understanding of these events criminologists have sought to distinguish types of mass murder events. These types have been based on categories of victims and on presumed motive. In general five broad categories of mass murder have been described these include a) work place related, b) family related, c) school shootings, d) killings connected with other felonies, and e) stranger victim murders or “other” category. In some cases these categories overlap.

- a) Work place related mass murder has been linked to the problem of disgruntled employees. Often these employees were fired or placed on some form of medical

- leave or disability. Partially in response to this problem many employers have adopted security procedures which address issues around termination.
- b) Family related killings usually involve older male family members who are depressed or in despair over conditions in their lives. They often involve alcohol. One psychiatrist has used the label “family annihilator” to describe the motivation to kill all or most family members.
 - c) School shootings have been widely studied in the wake of the Columbine shooting in 1999. Prior to the 1970s shootings were most likely to occur in urban schools and involve conflicts or other felonious behavior. More recently shooting have occurred in suburban schools and perpetrators have mostly been white male students responding to bullying or other feelings of alienation, often shared among a small group which had access to weapons.
 - d) Mass murders connected with other felonies have involved murders of hostages in the context of other crimes such as robbery. In these cases perpetrators anticipate material gain rather than expressive gain as in other types of cases.
 - e) The stranger victim and “other” category of mass murder involves the selection of victims who are generally unknown to the perpetrators but selected based on availability and convenience. Those committing these events have often experienced some recent psychological trauma. In most cases perpetrators have little or no criminal record.

The typology above provides rudimentary information on mass murder. In general post event analyses of mass murder have focused on individual explanations and identified motives involving serious psychological problems. One other element in the research has been that in many cases of mass murder, family and friends have been able to retrospectively identify changes in the perpetrator’s behavior or other events which they later identified as troublesome and come to be regarded as precursors to the murder event. These may involve threats to kill large numbers of people, efforts to acquire weapons or “train” with weapons or even signals sent to others to avoid places and times in which the event is planned to occur.

Little information on this topic reaches the level which might be considered a theory of mass murder which, in turn, might help prevent such events. However, analysis of multiple cases and particularly cases of school related mass murder has suggested a sequence of activity that may be useful to understanding and perhaps preventing events.

Some research has described a sequence of 1) chronic strain, 2) uncontrolled strain, 3) acute strain, 4) a planning stage and 5) the event itself. Chronic strain could mean a string of work related failures such as negative reviews or failed projects. It could mean long term bullying or lasting financial problems. This strain can lead to uncontrolled strain when no relationships provide mitigation and a person finds themselves increasingly isolated from others who might provide comfort. Acute strain refers to some precipitating event which is consistent with but more urgent than the longer term strains. These might involve a sudden breakup, loss of employment or receipt of unsatisfactory grades. That has been followed by a planning stage. Subjects may accumulate weapons

and ammunition, scout potential targets and warn others not to be present at some point in the future. In the case of the Columbine shooting there is evidence that Eric Harris and Dylan Kliebold planned the attack for more than one year. Well planned and well equipped, the killers then put their plan in motion.

5. Responding to Mass Murder

Analyses of event of mass murder have indicated that there are factors critical to successful responses to the events once they have begun. Those successes would entail successful containment of the event, minimization of harms associated with the event, appropriate control and processing of the scene, provision of appropriate psychological and counseling services to a range of persons involved including nonfatal victims, victims' families and friends, responders and emergency service providers, and detailed after-action analysis of the event and the response to it.

In response to these needs communities should have written plans on which they also train and which include plans and tests of the interoperability of communications systems, clear plans establishing lines of command and control, and plans for deployment of first responders. Additionally, plans should be in place to provide post-trauma interventions, quality scene and case management, after action analyses and regular planning sessions.

6. Prediction and Prevention

The nature of mass murder has made it difficult to predict and thus difficult to prevent. Statistically rare events, and events involving a single or small number of assailants, often with no criminal record, present significant barriers to most approaches to prediction. This does not, however, mean that there is little that can be done. The research on school related mass murder and workplace mass murders have been instructive.

Studies of work place problems have shown that individuals in situations of high stress can be identified and assistance can be provided through employee assistance programs and other outlets. Furthermore, protocols regarding terminations can offer access to transitional services that may reduce stress and may minimize the potential for violence by eliminating contact between terminated employees and their former employers. Physical security can play a significant role.

Physical security including magnetometers and restricted entrance have also been seen as significant in controlling school violence. Other factors have also been identified. Anti-bullying educational programs and appropriate responses to instances of bullying or other demeaning behavior have been widely instituted. Conflict resolution programs in schools have also been initiated.

Schools have also adopted other approaches to respond to this problem. School level threat assessment teams have been instituted. These teams collect information on students and student conflict, provide a means of human surveillance and information gathering, and share information with many others in the school. They are part of an intelligence gathering process meant to identify students having trouble and provide interventions to solve problems and minimize disruption for the school and the students involved.

Discussions of policy changes to prevent mass murder are quite limited. Some studies have shown that greater control of high power weapons has led to reductions in mass murder in other countries. The impact of right to carry concealed weapons laws in this country has been studied. In most of that research there has been no impact (neither increased nor decreased) on mass murder as a result of those laws. Analyses of school violence involving young people have argued that controlling access to guns can be an important preventative measure.

7. Considerations Regarding a Plan of Action

Even in the face of obvious difficulty there seems to be several approaches that may have some value in addressing this problem.

1. Target hardening has been a traditional response to the threat of violence. Physical structures that might be targeted for violence can be protected with physical security, and technology. This may be useful with regard to preventing workplace violence. In many instances of mass murder, however, the assailant selects target locations by convenience and availability rather than more deliberate design. Therefore, target hardening may have a limited role in prevention unless there is some reason to view the risks as higher for some structures than others. Although the data are not precise, it does appear that certain structures such as government buildings may present a high risk than others and may thus legitimate the investment in target hardening. Similarly the principles of crime prevention through environmental design may be useful in minimizing settings in which observation or detection of undesirable behavior is difficult. While the logic of the points made above seems clear, it should also be noted that the research on mass murder does not indicate these will have strong preventative value. The events are too rare statistically, and the targets are often too ill-defined or nearly random to suggest a clear benefit of selecting some structures for protection. As noted above, this analysis does not apply to political violence.
2. It is also clear that addressing known threats can be useful in the prevention of violence. A person who presents a clear threat to someone or someplace and is regarded as capable of carrying out such a threat, does merit attention. That person could be prevented access to some known targets. This approach may apply best to concerns of workplace violence but it will be of limited value where

the relationship between perpetrator and victim is one either of intimacy or where they are strangers or near strangers to one another.

3. Schools have demonstrated the value of intelligence systems that attempt to identify and assess threats. In doing so school officials also benefit from concern with protecting a known building or campus and an identifiable student group. Those with more generalized concern about preventing mass murder do not share those benefits. This does not mean, however, that intelligence collection and social networking analyses will not be of value. Bear in mind that warning signs are often identified in post incident reviews. It is possible to organize a system in which key community resources are asked to look out for and assist people undergoing high degrees of stress. Police and neighborhood workers, teachers, clergy, 911 workers, firemen, employers and others could clearly play a part if appropriately alerted and if informed about outlets for sharing information. The goals would be to cultivate the sensitivity needed to identify potential precursor behavior. Over prediction of such behavior is likely to be a problem but should not carry too much weight if there are no negative consequences to identification under this approach.

One could even imagine public service messages during stressful times in which, without any reference to potential violence, citizens are asked to look out for friends and neighbors who may need assistance or who act uncharacteristically. Those messages could also contain information on appropriate referral sites. Similarly, telephone help lines where troubled persons may seek help are widely available and could be more widely advertised during times of high stress. A broadly caring community, in which that caring approach is linked to specific interventions and programs, may offer the most protection against this form of violence.

4. The horrific consequences of mass murder are what drive concern for prevention even when it is recognized that these events are likely to be very difficult to predict or prevent. The mathematical reality, however, does not limit the responsibility for continuously seeking ways to reduce the potential for such events in one's own community. It follows then that we should be vigilant in our review of this problem and our analysis of events when they do occur across the nation. Those charged with looking out for the public's safety should regularly ascertain the state of knowledge in this area and seek ways to improve the chances of preventing these events, as well as responding to them most effectively should they occur. Discussions should be documented in order to build a knowledge base relevant to the problem and the local community.

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