

# **The Factors of Lethality: A Literature Review**

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Rochester, NY is one of seventeen sites selected for the Gun Involved Violence Elimination (GIVE) initiative, which is funded by the New York State Division of Criminal Justice Services. GIVE sites will incorporate up to six evidence-based practices (street outreach, problem oriented policing, hot spot policing, crime prevention through environmental design, procedural justice, and focused deterrence) to develop a multi-component strategy targeting gun violence.

The Center for Public Safety Initiatives is developing a series of working papers that focus on gun violence and the many ways it impacts the City of Rochester and Monroe County. This is the second paper in the series, and it examines the state of literature relating to the situational factors of gun violence.

## **Introduction**

The study of the situational factors surrounding lethality has predominantly focused on the presence of firearms: do guns increase the likelihood of lethality, or will violent people create lethal outcomes regardless of the weapons at their disposal (Felson & Messner, 1996; Zimring, 1968)? In the last two decades, this research has expanded to examine not just how weapons influence lethal events but how a myriad of situational, behavioral, and contextual factors can impact lethality (Weaver et al., 2004). The following paper reviews some of this research.

## **Weapon Instrumentality**

Weapon instrumentality is a hypothesis proposing that offenders, typically, do not have an unequivocal intent to kill (Zimring, 1968). Lethal outcomes are based on chance circumstances surrounding the act, and death is largely due to the weapon used (Felson and Messner, 1996; Zimring, 1968). It has been argued that the proliferation of firearms increases the lethality of violent events, as there is a higher likelihood that the offender will use a firearm as opposed to another weapon or no weapon during the act (Cook, 1991; Zimring & Hawkins, 1997).

Further, firearms can facilitate violent crime. Unlike most weapons, a gun can inflict injury at a distance and makes it easier to assault multiple victims at once (Kleck and McElrath, 1991). Firearms may also provide the instigator with both the courage and an “antiseptic” means of engaging in violence and – potentially – the means of obtaining their end goal without engaging in more direct forms of violence (Kleck and McElrath, 1991; Phillips and Maume, 2007). Phillips and Maume considered offender intent and weapon lethality when interviewing 100 men imprisoned for homicide and aggravated assault (2007). Of the incidents where the offenders had a firearm, 75% turned violent, versus 24% when the offender was unarmed (Phillips and Maume, 2007). In considering only the incidents where the respondent did not have a gun at all or already had a gun on his person (as opposed to incidents in which the offender obtained the firearm after the dispute initiated), 69% of already-armed respondents resorted to violence versus 33% of unarmed respondents (Phillips and Maume, 2007). Ultimately, the researchers found that after eliminating instances where the offender obtained a firearm following the initiation of a dispute and controlling for level of anger, the relationship between guns and violence was weakened (Phillips and Maume, 2007).

Whatever the motive may be, the weapon instrumentality effect proposes that the use of firearms increases the likelihood of death relative to other weapons (e.g. knives, blunt objects, personal weapons) – a finding that has been supported in the literature (Wells and Horney, 2002). In their analyses of stranger violence in the National Crime Survey (NCS) and Supplemental Homicide Report (SHR), Kleck and McElrath found that – when injuries existed – firearms were most likely to result in death (1991). Conversely, the more lethal the weapon used, the less likely it would inflict an injury. The presence of a firearm was often enough to achieve a criminal goal without inflicting injury (Kleck and McElrath, 1991).

Felson and Messner used NCS and SHR data in their analysis of stranger and non-stranger assaults and homicides (1996). They too found that lethal outcomes were more likely to occur when the assailant used a gun compared to other weapons (Felson and Messner, 1996). Wells and Horney used self-reported data from incarcerated males to examine over 2,000 violent and potentially violent incidents (2002). They found a decrease (58%) in the odds of a non-lethal injury occurring when a respondent was attacked with a firearm; however, the odds of serious injury increased sixty-fold (Wells and Horney, 2002).

## **Situational Factors of Lethality**

Violence is dynamic. Characteristics of the offender, victim, and the behavioral, social and environmental context surrounding an event all help shape the outcome of violence (Meier, Kennedy, & Sacco, 2001; Miethe and Meier, 1994; Weaver, 2004). Consider how the physical location, the relationship between the victim and offender, and the behavioral setting all hold importance when considering violent interactions: crime is not evenly distributed across a location. There are concentrations within certain areas; a person has a higher risk of victimization in these “hot spots” compared with other locations (Braga, Papachristos, & Hureau, 2010; Sherman, Gartner, & Buerger, 1989; Miethe and Meier, 1994; Weisburd, Groff, & Yang, 2012). Further, the behavioral setting establishes predisposing and precipitating factors (e.g. escape routes, access to weapons, the presence of third parties) and facilitates the interaction between the offender, victim, and the environment.

The interpersonal relationship and cultural similarity of the victim and offender may shape the motivation for the crime. The interpersonal and cultural relationship between victim and offender is considered by Rennison, Jacques, and Berge in their theory of social distance (2011). This theory proposes that the potential for lethality in a violent event increases if the interpersonal relationship is weaker and if the cultural background between victim and offender is less similar (Rennison, Jacques, and Berge, 2011). Analyzing data from the National Crime Victimization Survey, Rennison et al. found that when victim and offender were less familiar with each other or were culturally dissimilar, there was a greater potential for lethality in violent interactions (Rennison et al., 2011). On the contrary, while not expressly testing cultural distance, Nielsen, Martinez, and Rosenfeld found that intra-ethnic incidents had a greater likelihood of ending in death than inter-ethnic incidents among Whites, Blacks, and Latinos in Miami, Florida (2005). Race is perhaps a weak predictor of cultural values and beliefs compared to, say, whether both victim and offender are in a gang, have criminal histories, or are known to one another. Past behaviors appear more predictive of violent outcomes than basic demographics.

Individuals with low self-control or who internalize street code values that suggest the willingness to use violence to maintain respect may be more likely to respond violently to perceived provocations (Anderson, 1999; Gottfredson and Hirschi, 1993; Wilkinson, 2009).

Likewise, individuals may engage in behaviors that increase their risk of victimization (Meier and Meithe, 1993). In an analysis of the lethal event process, Ganpat, van der Leun, and Nieuwbeerta, found that victim characteristics shaped the process and outcome of lethal events, from insult, to threat, to violence, to homicide (2013). Several situational and behavioral characteristics of the victim (e.g. victim precipitation, alcohol use) significantly increased the likelihood of an interaction turning lethal (Ganpat, van der Leun, and Nieuwbeerta, 2013). Weaver, Clifford-Wittekind, Huff-Corzine, Corzine, Petee, and Jarvic analyzed data from the National Incident-Based Reporting system and found victim age and sex to be significantly predictive of lethality, with older and male victims more likely to have a violent encounter turn lethal than younger or female victims (2004).

Wells and Chermak examined victim characteristics in great detail, collecting self-report data from over 200 felony probationers on victimization in gun-related and non-gun related incidents (2011). Documented involvement with firearms was the strongest predictor for being in a serious gun victimization (Wells and Chermak, 2011). Probationers who were recently arrested, committed a drug offense, thought they were at risk for contact with the criminal justice system, committed a personal offense, or reported illegally possessing or carrying a firearm were at a significantly greater risk of gun victimization (Wells and Chermak, 2011). Contrary to expectation, gang members were not at a significantly higher risk of being gun-violence victims (Wells and Chermak, 2011).

## **Offender Intent**

There is considerable debate among criminologists about the role that criminal intent plays in the outcomes of gun violence. Some suggest that offender intentions are somewhat ambiguous, with most offenders intending to harm, but not necessarily kill, the victim (Zimring and Hawkins, 1997). An alternative perspective is that the weapon used reflects the intent of the offender to do harm. Thus, a gun fatality is interpreted as the result of a greater intent to kill (Felson and Messner, 1996).

Research in this area has sought to understand offender criminal intent under the assumption that intent to harm or kill is often shaped by situational and contextual factors. Offenders, while not necessarily possessing all information relevant to the event, may decide to

kill a victim in response to certain situational cues or victim characteristics. For example, Felson and Messner found that certain victim characteristics influenced lethality in violent encounters (1996). Black and male victims were more likely to be killed than white or female victims; encounters with single offenders were more likely to have lethal outcomes than encounters with multiple offenders (Felson and Messner, 1996). Felson and Messner concluded that tactical concerns, fear of retribution, desire to eliminate rivals, and the desire to gain status increases the likelihood that an offender will have lethal intent during a violent altercation (1996).

## **Conclusion**

As indicated, the relationship between offender intent, context-specific situations, victim and offender characteristics, and weapon lethality is complex. In the coming months, working papers will be developed that look at gun crime in Rochester and the situation-specific characteristics of these events.

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