WILEY AGGRESSIVE BEHAVIOR

Risk factors for youth violence: Youth violence commission, International Society For Research On Aggression (ISRA)

EDITOR'S NOTE

In March 2018, the President of the International Society for Research on Aggression (ISRA), Mike Potegal, appointed a special commission to prepare a report on youth violence. This commission was "charged with the task of producing a public statement on the known risk factors for youth violence, based on the current state of scientific knowledge. If the Commission finds sufficient evidence of harmful effects, then its public statement may include public policy recommendations." What follows is the final report of the Youth Violence Commission, delivered in March 2018. This report was written by a group of ISRA researchers with expertise on youth violence. This report is based on a previous youth violence report (Bushman et al., 2016), but it is shorter in length, more accessible in language, contains additional material, and is more up-to-date.

INTRODUCTION

In the wake of yet another mass shooting in the United States (U.S.), this one at Marjory Stoneman Douglas High School in Parkland, Florida, which killed 17 people and injured 17 others, the International Society for Research on Aggression (ISRA) formed a Youth Violence Commission to compose a list of known risk factors for youth violence. The purpose of this list is to bring some clarity to the enormously complex issue of how youth become violent. In a social policy environment of significant concern with and attention to school safety and mass shootings, our intention is to provide a critical reminder that the question of why individuals engage in acts of severe violence does not have any simple answers. We hope this list will be useful to policy makers, news reporters, and members of society who are concerned about violent acts committed by youth in the U.S. and around the world.

DEFINITIONS

By *violence* we mean any behavior intended to cause extreme physical harm, such as injury or death, to another person who does not want to be harmed (Bushman & Huesmann, 2010). Although there are many types of youth violence, one type – gun-facilitated violence – is well known to the public because of the number of recent high-profile incidents. Gun violence differs from other types of extreme violence only in the type of weapon used.

By youth violence we mean violent acts committed by young people. The Centers for Disease Control and Prevention (CDC) focuses on youth 10 to 24 years old (David-Ferdon & Simon, 2014). Here, we will concentrate on 15 to 24 years old, because violence tends to peak during this age range (U.S. Federal Bureau of Investigation, 2017).

MASS SHOOTINGS VERSUS STREET SHOOTINGS

When discussing gun violence, it is important to distinguish between 'mass' and 'street' shootings (Bushman et al., 2016). Mass shootings that occur in public settings such as schools, churches, movie theaters, malls, and concert venues, are relatively rare. They are shocking and devastating because they often include multiple, random victims. Street shootings occur in inner cities, often unfold between known antagonists, and are far more common. Despite their prevalence, street shooting victimizations do not generate the news media attention that mass shootings do, but they exact a terrible toll on the families and communities that are destabilized by these persistent acts of violence. As has been published previously (Bushman et al., 2016), Table 1 outlines some important differences between mass and street shootings.

KNOWN RISK FACTORS FOR YOUTH VIOLENCE

When mass shootings occur, people want to identify "the" cause, especially because mass shootings tend to beget more shootings. (Towers, Gomez-Lievano, Khan, Mubayi, & Castillo-Chavez, 2015). But there is no single cause. Violent behavior is very complex and is determined by multiple risk factors, often acting together. The rarer the violent behavior (e.g., from assault, to murder, to mass shooting), the more complex the causality may be. We separate known risk factors for youth violence into two categories: (1) Personal risk factors associated with the individual, and (2) Environmental factors associated with the situation or broader social context.

PERSONAL RISK FACTORS FOR YOUTH VIOLENCE

1. **Gender.** One risk marker for youth violence is gender (Fox & DeLateur, 2014; Kalish & Kimmel, 2010; Kimmel & Mahler, 2003;

TABLE 1 Some major descriptive differences between street shootings and mass shootings. Source: Bushman et al. (2016)

Street shootings	Mass shootings
Less rare	Extremely rare
Concentrated in inner cities	Concentrated in rural towns and suburbs
Non-white offenders overrepresented	White offenders overrepresented
Guns usually obtained from illegal gun market	Guns usually obtained from family members who purchased them legally
Preferred weapon is a handgun	Often multiple guns used, including semi-automatic rifles with high capacity magazines
Recidivist violent offenders common	Recidivist violent offenders uncommon
History of discipline problems common	History of discipline problems uncommon
Co-offending typical	Solo offending typical
Prior criminal victimization common	Prior criminal victimization uncommon
Suicide following homicide uncommon	Suicide following homicide very common
Victims mostly of same sex and race (often African American males)	Victims are male or female but mostly the same race
Victimization of family members highly unusual	Victimization of family members can occur prior to the mass shooting
Mostly from low income families	Mostly from middle income families
Substance use common	Substance use uncommon
Presence of mental illness uncommon	Presence of mental illness uncommon, but some symptoms of mental illness may be present
Generally below average in academic achievement	Generally average or above average in academic achievement
Generally personally know someone who has killed or been killed before	Generally do not personally know anyone who has killed or been killed before
Avoid media attention for shootings	Seek (and often obtain) media attention for shootings

Stone, 2015). Across the lifespan, males are more physically aggressive and violent than females (Björkqvist, 2018). The most dramatic gender differences are in physically violent behavior in young adulthood, where young men commit most of the violent crimes, murders, and the vast majority of mass shootings (U.S. Federal Bureau of Investigation, 2017). Many factors associated with gender likely contribute to this difference, but biological differences and perceptions of control or power associated with masculinity norms may contribute (Kimmel & Mahler, 2003).

2. **Aggressive behavior early in childhood.** One of the most consistent findings of longitudinal research conducted over the past 50 years has been that early aggressive behavior predicts later aggressive, antisocial, violent, and criminal behavior (Dubow, Huesmann, Boxer, & Smith, 2014; Dubow, Huesmann, Boxer, & Smith, 2016; Dubow, Huesmann, Boxer, Smith, & Sedlar, in press; Huesmann, Eron, & Dubow, 2002; Huesmann, Eron, Lefkowitz, & Walder, 1984). In other words, children displaying more physically aggressive behavior are more likely to grow up to be adults displaying more violent behavior.

3. **Personality and emotion regulation.** Some people are more prone to aggression and violence than others. Research has shown that youth who are characteristically angry also tend to be more aggressive and violent (DeLisi et al., 2010). When anger is poorly regulated (i.e., when it occurs too frequently, activated too quickly,

is too intense, and is long in duration) it raises the likelihood of violent behavior. In addition, four "dark" personality styles or traits are related to aggression and violence: (1) narcissism; (2) psychopathy; (3) Machiavellianism; and (4) sadism (Paulhus, Curtis, & Jones, 2018). Narcissists have grandiose self-views, a selfish orientation, and a lack of empathy for others. Narcissists think they are special people who deserve special treatment. When they do not get the respect they think they are entitled to, they can lash out at others in an aggressive and violent manner. A recent analysis found that narcissism might be a risk factor for mass shootings (Bushman, 2018). Psychopaths are callous and unemotional individuals who mainly focus on satisfying their desires in the moment, regardless of whether they hurt others in the process. Machiavellianism involves a mindset that ruthlessly focuses on gaining personal success and power by any means necessary, including using aggression and violence. Most people experience distress after hurting an innocent person, but for sadists it produces pleasure, excitement, and perhaps even sexual arousal. Although the four dark traits are theoretically distinct, they share common features (e.g., lack of empathy, callous manipulation of others).

4. **Obsession with weapons or death.** Another risk factor for violence is a preoccupation with weapons or death (Leary, Kowalski, Smith, & Phillips, 2003). This includes having an intense interest or fixation with guns, bombs, or explosives.

ENVIRONMENTAL RISK FACTORS FOR YOUTH VIOLENCE

1. **Easy access to guns.** Numerous studies have shown that easy access to guns is a strong risk factor for violence (Chapman, Alpers, Agho, & Jones, 2006; Rozel & Mulvey, 2017; Siegel, Ross, & King, 2013). Research has also shown that stricter gun laws reduce gun-related deaths around the world (Santaella-Tenorio, Cerdá, Villaveces, & Galea, 2016). Firearms with magazines that hold a large number of bullets allow the perpetrator to kill a greater number of victims in a shorter amount of time. Guns also provide psychological distance between the perpetrator and victim, which can make killing easier. The mere presence of guns can also increase the likelihood of aggressive responding in social situations (Berkowitz & LePage, 1967).

2. **Social exclusion and isolation.** Being regularly victimized or ostracized by peers is also a risk factor for youth violence (Raitanen, Sandberg, & Oksanen, 2017; Valdebenito, Ttofi, Eisner, & Gaffney, 2017). This may lead individuals to feel socially isolated, with little access to a support system that could otherwise be protective against violent behavior. Additionally, victims of bullying may develop feelings of strong resentment for a particular group of individuals or for a community at large, which is also a risk factor for mass shootings (Fox & Levin, 2003; Madfis, 2017; Madfis & Levin, 2013).

3. **Family and neighborhood characteristics.** There are a number of family characteristics that may be associated with youth violence. For example, research has found that coming from a family that experienced divorce, child maltreatment, domestic violence, being on welfare, having a mother who is young or unemployed or having a father with behavioral problems all increase the likelihood of young men committing violent acts (DeLisi, Piquero, & Cardwell, 2016; Farrington, Loeber, & Berg, 2012; Fox, Pereza, Cass, Bagliviob, & Epps, 2015). Further, growing up in a neighborhood marred by persistent violent crime and other indicators of social and physical disorder, and experiencing neighborhood violence directly as a witness or victim, can contribute to youths' risk for violent behavior (Tolan, Gorman-Smith, & Henry, 2003).

4. **Media violence.** Exposure to violent media is a cause of aggressive behavior and is correlated with violent criminal behavior (Bushman & Anderson, 2015), including mass shootings (O'Toole, 2000). It is important to note that the link between violent media and aggression is found in every country where studies have been conducted (Anderson et al., 2010, 2017). A number of long-term studies have also found that high exposure to violent media in childhood is related to violence later in life, including criminal behavior, spousal abuse, and assault (Huesmann, Moise-Titus, Podolski, & Eron, 2003). It is illogical to assume that advertising, an industry worth half a trillion dollars in 2016 (eMarketer, 2016), can influence consumer behavior, but that violent content in media does not influence aggressive behavior (Warburton, 2014). In addition, just as observing violence in the home, school, and community increases the odds of aggression, so too can observing violence in the media.

5. **School characteristics.** A number of studies have examined the characteristics of the school when a mass shooting takes place on school grounds (Baird, Roellke, & Zeifman, 2017; de Apodaca, Brighton, Perkins, Jackson, & Steege, 2012). Mass shootings are more likely to occur in schools with a large class size and a high student-to-teacher and student-to-counselor ratio. These characteristics can lead students to feel socially isolated and feel that they have few opportunities to seek help. Developing a strong sense of school community or "spirit" for each individual may reduce the likelihood of school shootings.

6. **Substance use.** Alcohol intoxication is frequently associated with aggressive and violent behavior (Parrott & Eckhardt, 2018). However, substance use is not a common factor of mass shootings.

7. **Stressful events.** There is a strong relation between stressful events (e.g., frustration, provocation, hot temperatures) and aggression (Groves & Anderson, 2018). Stressful events often make people angry, and can trigger aggressive and violent behavior.

CORRECTING COMMON MISPERCEPTIONS ABOUT YOUTH VIOLENCE

1. **Mental health problems**. In general, most people experiencing mental illness are not likely to behave in a violent manner (Lowe & Galea, 2017; Monahan et al., 2001; Rozel & Mulvey, 2017; Taylor, 2018). Indeed, people experiencing mental illness are much more likely to be the victims of violence than the perpetrators of violence. However, certain psychotic symptoms, such as delusions and command hallucinations (particularly when accompanied by anger or stress) can elevate risk for violence (Douglas, Guy, & Hart, 2009; Sariason, Lichtenstein, Larsson, & Fazel, 2016; Silverstein, Del Pozzo, Roché, Boyle, & Miskimen, 2015). Among people with mental disorders, the risk of them being violent is also increased by substance abuse (Silverstein et al., 2015). The compelling reason to restrict access to guns for people who are mentally ill is to reduce their risk of death by suicide.

2. **Low self-esteem.** Contrary to popular opinion, people who are aggressive do not suffer from low self-esteem (Bushman et al., 2009). Instead, people who are aggressive tend to have unstable and inflated self-esteem, or narcissistic self-views (Baumeister, Smart, & Boden, 1996).

3. **Arming teachers** (Fox & DeLateur, 2014). Arming teachers creates an environment where guns are easily accessible. The presence of guns in classrooms makes it more likely that students will be able to access guns and use them (intentionally or by accident) to harm other students or themselves. Firearm-licensed citizens (and even police officers) are not trained to shoot in crowded environments such as a school setting with an active shooter. Most bullets fired in close range exchanges miss the target, and can even accidentally hit innocent targets. It also sends a strong message that schools are unsafe, which can interfere with learning. Instead, we recommend

that school counselors and teachers be trained in violence risk assessments and de-escalation (Shepherd, Luebbers, & Ogloff, 2014). Furthermore, most Americans do not want teachers to be armed (Quinnipac University Poll, 2018).

REDUCING THE RISK OF YOUTH VIOLENCE

As noted, risk for violence is complex. Many risk factors such as gender, parental criminality, traumatic family experiences, and exposure to media violence are shared by individuals who will never become violent. However, when these risk factors are examined in the context of assessment strategies focused on the specific risk for targeted violence (e.g., when an individual makes statements or plans regarding a desire to commit a violent act), it may be possible to initiate effective treatment and prevent escalation to violence. Although some risk factors are static (i.e., not subject to change and thus not amenable to treatment), others are dynamic and thus malleable in the context of appropriate intervention. For example, it is not possible to alter a youth's history of maltreatment or exposure to domestic violence, but it is possible to improve a youth's capacity to manage intense anger, reduce his or her use of violent media, and limit his or her access to guns (Borum & Verhaagen, 2006). Evidence is growing that self-regulation skills are also malleable, beginning in early childhood (Diamond & Lee, 2011). Self-control training can increase self-control and decrease delinquency (Piquero, Jennings, & Farrington, 2010). The likelihood of violence also may be reduced by interventions focused on developing skills such as empathy, perspective taking, social problem-solving, and conflict resolution (Conduct Problems Prevention Research Group, 2011). For high risk youth, we must also invest in building protective factors (e.g., prosocial involvements, social support, attachment to positive role models, strong commitment to educational attainment).

News reporters can also play a role in reducing gun violence and other forms of mass murder. Prolonged media attention that uses fear tactics to increase viewership and provides publicity to perpetrators is counterproductive. It also provides a potential perpetrator with a script for committing these horrible acts of violence, such what to wear, the locations to kill the most people, and what weapons to use (Towers et al., 2015). Indeed, mass shooting perpetrators have fed off one another, some aspiring to exceed the body counts of predecessors. The shooter's name should not be mentioned. This may de-incentivize any future shooters who are using "fame" as a motive for violence (Bushman, 2018).

CONFLICT OF INTEREST

The authors have no conflict of interest to disclose.

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