Youth homicide Offenders: A review of recent literature

Gerard, F.J. and Khachatryan, N.

Youth homicide offenders: A review of recent literature

F. Jeane Gerard, Ph.D.

University of Westminster

Norair Khachatryan, Ph.D.

Northeastern University

Abstract

Despite the decrease in the prevalence juvenile-perpetrated homicide in the past couple of decades, these offenders continue to commit crimes that shock the public, and increase the need to understand the factors that contribute to this type of violent behavior by young people. The aim of the current chapter is to examine the literature on juvenile homicide offenders (JHOs) published since 2014, which is the year in which a comprehensive systematic review of juvenile homicide was published by Gerard and colleagues (2014). Using several databases, more than 50 relevant studies of JHOs and other types of young homicide offenders were identified for inclusion in the chapter, and they were divided into seven categories: JHOs' characteristics and risk, gender and race differences, killings within the family, mass murder and school shootings, sexual homicide, legal processing and sentencing, and recidivism. The chapter concludes with a summary of the findings and their implications for policy.

Intro

The “youth crime” problem has been presented and amplified in the media, portraying young people as dangerous and incontrollable, and ever increasing in proportion (Case et al., 2021). Despite predictions of an exponential increase in homicides committed by juveniles in the new millennium (Fox, 1996) in the United States of America (USA), the prevalence of juvenile-perpetrated homicide declined by approximately one-half between 1995 and 2019, from 15.3% of all individuals arrested for murder in 1995 to 7.8% in 2019 (Heide, 2022). Nevertheless, this remains a topic of importance. Homicides committed by young offenders continue to shock the public, just as they did in the 1990s. An example of a senseless juvenile homicide case in the USA is of a 14-year-old boy who was recently convicted of a first-degree murder committed in 2021 in Florida, when he stabbed a 13-year-old girl over 100 times and was sentenced to life in prison. This premeditated and brutal attack was described by the judge as without motive (Alonso & Sottile, 2023). Understanding the factors involved in such cases are crucial for tailoring intervention and prevention strategies.

The definition of homicide, or the killing of an individual by another one, tends to be differentiated in various ways, depending on the country (Smit et al., 2012). What constitutes an acceptable/excusable or unacceptable killing is very much socially, historically, and culturally constructed (Brookman, 2005). Adolescence is also socially constructed and has often been used interchangeably with the term “juvenile” in the literature, although juvenile status is legally established by a government (Heide, 1999). Adolescence is related to a developmental phase, linked to hormonal, physical and psychological changes that tend to occur between the ages of 12 to 20 years old (Heide, 1999). As such, when examining this topic, studies tend to use a diverse range of offenders’ ages for their studies, some focusing on those who are under the age of 18, whilst others include youths up to the age of 25 (e.g., Carcach, 1997) in their samples. Additionally, the age of criminal responsibility varies across

the world. For example, across Europe, this age varies between 10 years old to 18 years old; it is 10 in England and Wales, 13 in France, 14 in Germany, 16 in Spain, and 18 in Belgium (Marttunen, 2008). Therefore, examining offenders up to the age of 21 years old will also consider these notions of developmental stages, puberty and hormonal changes, as well as psychological, emotional and physical development (Heide, 2003).

A systematic review of the literature on the characteristics and the risk factors of juvenile homicide was published in 2014 (Gerard et al., 2014). The findings emphasized the heterogeneity of JHOs and the cumulative effect of ten risk factors that were identified consistently across high-quality academic studies: being male; low executive functioning; illness; epilepsy; violent family members; criminal family members; previous contact with the court; low academic achievement; gang/criminal group membership; and weapon possession. These factors highlight the influence of biopsychosocial factors in the development of homicide offenders. Additionally, Heide (2015) described the demographic profile of juveniles arrested for murder in the USA as being majority male (92%), Black (55%), over 14 years old (88%), from a large city (60%). These offenders mainly kill in conflict-related (31%) or crime-related circumstances (30%), and 68% were found to have killed their victim with a gun.

The scope of research on juvenile homicide has grown in the past two decades. This field used to be primarily dominated with case studies and small clinical samples (Heide, 2003), but has since included studies with larger samples from a variety of countries (e.g., Farrington et al., 2012; Heide et al., 2012).

The current chapter has scoped all studies related to JHOs that have been published since 2014 to investigate the trends in contemporary research on juvenile homicide. As such, a systematic search of the literature was performed in the academic databases Psycinfo, Proquest, Google Scholar, and PubMed, using the following keywords (juvenile or youth* or

adolescent* or teenager* or child* or young) and (Homicide or murder* or kill*), as well as looking at reference sections of relevant studies. Theses and dissertations, as well as non-empirical works, were excluded from this investigation. Through this search, seven main themes differentiating between studies published on JHOs were found, and studies in each theme will be reviewed in turn.

This chapter starts by describing the characteristics, risk factors and profiles of JHOs. Thereafter, studies that examined gender and racial differences between JHOs are reviewed. Specific groups of JHOs, such as those who kill family members, mass murderers, and sexual murderers are subsequently discussed. The last two themes in the chapter are the legal processing and sentencing of JHOs, followed by JHOs' post-incarceration recidivism. The chapter concludes with a summary of key points.

1. JHOs' characteristics and risk factors

The bulk of studies that have been published since 2014 on juvenile homicide have been mainly based on quantitative descriptive analyses, looking at characteristics and risk factors of JHOs. However, two qualitative studies were found that looked at risk factors and dynamics involved in the killing by young people. The first study by Drybread (2014) looked at the particular context of a Brazilian juvenile detention center and highlighted the importance of JHOs' perception of their own masculinity status. As such, a recurrent term was used by these youths: "sujeito-homem" or "a man-subject" to establish their virility and courage, as well as assert their masculinity through violent actions. In the second study, Lo and Tam (2018) focused on a group of JHOs who were part of a Chinese triad youth gang, and identified the importance of forming social relationships in compelling young people to join and remain in a gang.

Most studies on characteristics and risk factors of JHOs have been quantitative in nature, can be divided into four subcategories: classification-based studies, descriptive

studies, case control studies and prospective studies. The findings from studies tied to some of the subcategories will summarized in tables, for the sake of better flow. For example, Table 1 below presents the findings from four classification-based studies of JHOs.

Table 1. Description of quantitative studies and their proposed classification of JHOs

Study	Study population	Proposed classification
- Adhia et al (2019) - Descriptive - USA	- Cases of murder suicides National Violent Death Reporting system - 20 cases of murder suicide - Aged under 21 years old - Male offenders (93.6%) - Data collected: 2003 to 2016	Three groups: perversions of self-control (i.e., suicidal intent occurs after the homicide; n = 11), justice (i.e., killing is seen as getting justice for wrongdoing; n = 8), and mercy (i.e., to prevent perceived suffering of others; n = 1).
- Fox et al. (2021) - Latent class analysis - USA	-FBI's SHR data - 44,152 White and Black male JHOs (single victim) -Age: 6-17 years old, - Data collected: 1976–2016	6 categories: 1) Older Black Firearm Offenders; 2) Crime□Related Group Offenders; 3) White Gang□ and Conflict□Related Offenders; 4) Lone Conflict□Related Offender; 5) Lone White Parricide and Family Offenders; 6) Vulnerable Victims and Crime□Related Lone Offenders.
- Gerard et al. (2020) - Smallest Space Analysis - French-speaking part of Belgium	- 67 juveniles charged with murder/attempted murder -96% males - Age: Under 22 years old - Data collected: 1995-2009	3 categories: Expressive; multiple offenders (homicide seem to have occurred during social encounters); Instrumental; theft (instrumental aim that leads to further violent aggression); Instrumental; sex/ forensic awareness (two subthemes: forensic awareness and a sexual element to the crime).
- Hemenway & Solnick (2017) - Descriptive - USA	- 16 States reporting to the National Violent Death Reporting System (NVDRS) -154 child suspects of homicide - Aged 0-14 - Data collected: 2005-2012	5 categories: (accounting for over 70% of detailed cases) (1) The caretaker (i.e., youth who was caring for another child at the time); (2) Killing an adult family member (e.g., parent); (3) Impulsive shooting during play; (4) Robbery; (5) Group Assault (i.e., group of youths fighting other youths).

A descriptive study conducted in England and Wales by Welfare & Hollin (2015), using a convenience sample of 34 young men (15-17 years old) serving indeterminate or long-term sentences (composed of 8 male JHOs and 26 male violent offenders (manslaughter/GBH)). They looked at the prevalence in each group of adverse childhood experiences (ACEs). They concluded that all 34 participants had experienced trauma at different levels and that 44% of the sample had symptoms reaching PTSD levels as assessed by the Impact of Events Scale–Revised (IES–R) questionnaire.

Additionally, a study conducted by Richards and Keatley (2022) used the temporal method of Behavior Sequence Analysis and Crime Script Analysis (CSA) to analyze 19 in-depth cases of JHOs (10 males and 9 females) with clear temporal information that occurred in diverse English-speaking countries (i.e.., UK, North America, and Australia/New Zealand). They highlighted the importance of the relationships between key events in the youths' life history: parental separation, parents with drug abuse and criminal histories, presence of siblings, and suffering from mental illness. CSA showed potential pathways and the temporal chain of antecedent behaviors that lead up to the crime commission in five sequential scenes (influence, operational, reconnaissance, activity, and withdrawal).

Furthermore, the findings from the five case control studies were summarized in Table 2, as well as significant risk factors associated with juvenile homicide. Studies used different types of samples, in terms of sample size (ranged from 74 to 546), the age of the offenders (12-21), or the composition of the control groups (e.g., non-homicidal violent offenders or non-violent offenders). Studies were conducted in USA, Turkey, Brazil and Argentina.

Table 2. Description of 5 Case Control Studies

Study	Study population	Risk factors
-Cope et al. (2014)	-155 male juvenile offenders incarcerated in a youth facility	Compared to non-homicide offenders, JHOs have:

-USA	-20 JHOs -135 non-homicide offenders -Aged 14-19 -Data collected 2007-2011	***reduced gray matter in the brain
- Erbay & Buker (2019) - Turkey	- All juveniles adjudicated in same juvenile Court district at study time. - 182 nonviolent male offenders - 182 nonhomicidal violent male offenders -182 homicidal male offenders (murder/attempted murder) - Randomly selected - Aged 12-18 - Data collected: 2006-2017	A) Compared to nonhomicidal violent male offenders, JHOs were more likely: *Older **Lower income **Do not domestically migrate *Have a paid job ** School dropouts B) Compared to nonviolent male offenders, JHOs were more likely: *Older **Non-criminal father **Do not share problems with family *Do not domestic migrate **Do not have risky friends **Do not exhibit drug abuse **Have a paid job
- Maurer et al (2021) - USA	- 208 incarcerated male youth offenders recruited from juvenile correctional facilities -79 homicide offenders (murder/attempted murder, and/or manslaughter) -117 non homicide offenders - Aged 14-20	Compared to non-homicide offenders, JHOs scored higher on: *** PCL: YV total ***PCL: YV Factor 2 **PCL: YV Facet 2 ***PCL: YV Facet 3 ***PCL: YV Facet 4 **BIS-11 Attention and PCL: YV Factor 2 **BIS-11 Self-Control and PCL: YV Total ***BIS-11 Self-Control and PCL: YV Factor 3 ***BIS-11 Self-Control and PCL: YV Facet 3 ***BIS-11 Self-Control and PCL: YV Facet 4 **BIS-11 Cognitive Complexity and PCL: YV Facet 3
- Schorr et al (2019) -Brazil	-All male offenders (n=74) who were in the temporary custody unit in July 2017. - 18 male homicide offenders (homicide/attempted murder) -56 male non homicide offenders	Compared to non-homicide offenders, JHOs more likely: *Fewer years of schooling *Belong to a criminal organization

	- Age: under 18 years old - Data collected: July 2017	
- Wiese et al (2014) -Argentina	-195 cases of JHOs (130 had committed homicide, 15 had repeated homicide, and 50 had attempted homicide) - 305 young males who had committed other types of crimes (i.e., robbery and sexual offense). -all institutionalized for 1st time. - Age: 14-21 - Data collected: 2015-2017	Compared to non-homicide offenders, JHOs scored higher on: *PCL-YV Total ***PCL: YV Factor 4

Four prospective cohort studies were found to have been published since 2014, all on samples from different states in the USA. Three of the studies used a control group: (Ahonen et al., 2017; Baglivio & Wolfe, 2017; DeLisi et al., 2016), and the fourth study looked at the reasons for JHOs' involvement in the killing (Heide, 2020). As such, Heide (2020) found that JHOs ranked the following variables as the biggest factors that influenced them to commit the homicide offense: peer pressure; being high on alcohol/drugs; the crime "just happened"; and crime was routine in the neighborhood.

Table 3. Risk factors identified by the three cohort studies.

Risk factor	Studies		
	Baglivio & Wolfe (2017)	DeLisi et al. (2016)	Ahonen et al. (2017)
<u>Demographics</u>			
Gender: Male	✓*	✓	
Low socio-economic status			✓*
Ethnicity	✓** (Black)	✓	
<u>Illness and injury</u>			
Head injury		✓	
<u>Psychological disorder</u>			
Mental health problem	✓		
Anger index	✓*		
Anxiety	✓		
Self-mutilation	✓*		

Responsibility index	□		
CIDI depression in past year		□	
CIDI PTSD in past year		□	
CIDI alcohol abuse in past year		□	
CIDI substance abuse in past year		□	
Ever saw a psychologist, counsellor		□	
Alcohol use (past 6 months)		□	
Marijuana (past 6 months)/ substance abuse	□	□	
WASI full scale IQ		□*	
<u>Individual characteristics</u>			
Bullying offending		□	
Bullying victimization		□	
Lack of guilt			□ *
Moral disengagement		□	
<u>Familial characteristics</u>			
Broken family			□*
Family on welfare			□*
Young mother			□*
Unemployed mother			□*
Father's behavioral problems			□*
Child witnessed violence/ Family violence	□		
Child welfare placement	□		
Household substance abuse	□		
Household mental illness	□*		
Household incarcerated/family member arrested or in prison	□	□	
Parent occupation status		□	
Unsupervised routine		□	
<u>Antisocial behavior/delinquency</u>			
Age at 1st referral/ 1st offense	□	□	
Violent felony	□*		
Sex felony	□		
Serious delinquency			□ *
Offense variety (past 6 months)		□	
Cruel to people			□ *
Prior court contact for violent or delinquent offending/ prior arrest		□	
Gang membership		□	
Antisocial/delinquent peers	□	□	□ *
<u>Education</u>			
Low academic achievement/academic performance/old for the grade	□	□ *	□*
Suspension/expulsion and school conduct	□	□	□*
Disruptive behavior disorder			□*
School attendance/ Truancy	□		□ *
<u>Environment/Neighborhood</u>			
Neighborhood disorder		□	□*

Exposure to Violence (ETV) Inventory	□*
Weapon availability	
Weapon possession/Gun carrying	□

Note. □ risk factor assessed, * $p < .05$ for juvenile homicide offender group, ** $p < .01$ for juvenile homicide offender group.

Table 3 summarizes the risk factors for homicide identified in the other three studies within this subcategory. As shown in the table, risk factors related to demographics, illness and injury, psychological disorder, individual characteristics, familial characteristics, antisocial behavior/delinquency, education, environment/neighborhood and weapon availability were examined. DeLisi and colleagues (2016) compared homicide offenders to non-homicide offenders in the Pathways to Desistance data set and the state of Florida, respectively. Ahonen and her colleagues (2017) compared young homicide offenders to young homicide victims in the Pittsburgh Youth Study. The significant risk factors for committing homicide identified in at least one of these studies were: being male, being Black, being from a low socioeconomic background, exposure to neighborhood violence, elevated anger, history of self-mutilation, low IQ, lack of guilt, broken family, family on welfare, having a young mother, having an unemployed mother, a father's behavioral problems, family mental illness, having committed a previous violent felony, being involved in serious delinquency, being cruel to people, associating with antisocial/delinquent peers, suspension/expulsion and school misconduct, disruptive behavior disorder, school attendance/ truancy, and low academic performance.

2. Gender and Race Differences

There have been relatively few publications that examined female JHOs in the last 10 years, compared to the nine studies published between 2004-2013, which tended to use samples from the USA. The more recent studies provide information from other countries too: the four studies found were conducted in the USA, England and Wales, Brazil, and Turkey. Two of the studies were quantitative, one was qualitative, and one was a case study.

The first study builds on the body of knowledge that has been developed by Dr. Kathleen Heide and her colleagues on gender differences among JHOs in the USA (e.g., Heide et al., 2012; Sellers & Heide, 2012). Using data from the Supplementary Homicide Report (SHR) database (for the years 1976-2007), Heide and Sellers (2014) compared age differences in the commission of homicide by females aged 6-12 years old and 13-17 years old. Bivariate analyses identified several significant differences between the two age groups. Girls under 13 were significantly more likely than the older ones to: kill children aged 1–5 and 6–12, female victims, siblings and other family members; use personal weapons (e.g., hands, feet), fire, and other methods; kill without accomplices and kill in conflict-related circumstances. In contrast, girls aged 13-17 were significantly more likely to: kill victims aged 18–24 years old; kill intimate partners and offspring; to use guns; have accomplice(s); and kill in crime-related circumstances. A logistic regression found that "younger girls were seven times more likely than older girls to kill children aged 0–12 years, and were five times more likely than their teen counterparts to be involved in conflict-related homicides as opposed to crime-related homicides" (Heide & Sellers, 2014, pp 467). This study was the first to break down female JHOs into various age categories and show age differences linked to the type of homicide committed.

In the second quantitative study, Gerard and colleagues (2017) analyzed a sample of 318 cases of young people (aged 21 or under) charged with murder in England and Wales between 2007-2011. The authors found significant differences between male and female juveniles, with female JHOs being significantly more likely to murder a family member and a victim below the age of 5, and male JHOs being significantly more likely to murder a stranger. Interestingly, there were no significant differences between the two on the method of killing, in contrast to previous research (Sellers & Heide, 2012). Both male and female

JHOs tended to use knives to commit the killings, as firearms are illegal in England and Wales except for those who have a sporting or hunting license (Home Office, 2022).

One qualitative study was conducted in Brazil, exploring the personal narratives of 13 incarcerated female JHOs (Otto, 2020). The researcher found three main narrative frames used by female JHOs to make sense of their crime: “violence as a gendered resource; violence as a gendered failure; and violence as a gendered dilemma” (pp703). In the “violence as a gendered resource” frame, Otto (2020) found that the girls took responsibility and saw their violence as a way of reasserting their feminine identity through responsibility and self-control. In the “violence as a gendered failure” frame, the narratives reflect ‘self-despair’ and being forced into violence to survive. These offenders felt guilty and like failures in their female role (e.g., wife, daughter, mother). In the “violence as a gendered dilemma” frame, the narratives were centered around a contradiction between their understanding of femininity and violence, as they had attempted to protect romantic relationships threatened by other women.

In the final study published since 2014 to examine female JHOs, a Turkish case study of a 12-year-old girl who stabbed mortally her 3-year-old sister and attempted suicide is analyzed by Gokten and Kilicoglub (2015). The researchers explored the risk factors involved in that case, and found that the offender had been physically abused by her father and forced to look after her younger sister whilst being forcefully separated from their mother.

Since 2014, only one study has analyzed racial differences among JHOs. Using 37 years of data from the SHR, Heide and colleagues (2020) explored racial differences between 52,926 JHOs. When considering only cases with single victims, the analyses showed significant and meaningful differences between the different racial groups (White, Black, Asian/Pacific Islander, and American Indian/Alaska Native) on four victim-and incident-

related characteristics. Regarding the race of the victim, White JHOs were more likely to commit intra-racial murders than the other three racial groups. With respect to victim-offender relationship, white JHOs were significantly more likely than the other racial groups to kill their parents, whilst Black and American Indian/Alaska Native JHOs were more likely than the other groups to kill a stranger. Regarding the method of killing, Black JHOs were more likely than the other three groups to use guns, whilst American Indian/Alaska Native JHOs were more likely than the other groups to use knives or personal weapons.

Lastly, several significant differences between the racial groups were identified in terms of homicide circumstances. Compared to all other groups, gang-related homicides were more likely to involve Asian/Pacific Islander juveniles, conflict-related homicides were more likely to be committed by American Indian/Alaska Native juveniles and crime-related homicides were more likely to be committed by Black juveniles.

3. Killings within the family

Homicide perpetrated by juveniles is rare but when family members are targeted, it is even rarer. The rate of parricides (i.e., killing of father/mother/both) by juveniles in the USA between 1976-1999 was assessed by Heide and Petee (2007) at 21% out of a sample size of 5,558 parricides.

Only three studies that specifically investigated juveniles who killed their parents or siblings were found to have been published since 2014. These three studies are discussed below. In several studies, it was not possible to differentiate juveniles from adults and these were excluded (e.g., Fegadel & Heide, 2015; Hubbell et al., 2019).

In the study by Walsh and Krienert (2014), the researchers used a sample of 1,002 offenders who had killed a sibling extracted from the SHR. These individuals committed the killing between 2000-2007 when they were under the age of 22. The authors found some significant differences between female and male offenders, with male offenders being more

likely to kill an older brother and to use firearms or knives, and girls being more likely to use weapons other than guns and knives. Female offenders also tended to kill victims who were female and younger than the age of 13 years. Moreover, the female victims in the sample were more likely to be killed during a felony, whilst male victims were more likely to be killed due to an argument.

In analyses of parricide offenses that occurred in England Wales between 1977 and 2012, Holt (2017) uncovered two significant differences between juvenile parricide offenders (n = 64) and their adult counterparts (n = 629). First, the juvenile offenders were more likely to kill a father, rather than a mother. And second, juvenile offenders were less likely to receive a verdict of manslaughter due to diminished responsibility for their killing.

Lastly, Viñas-Racionero and colleagues (2017) used a non-random sample of 16 familicides (i.e., murder/attempted murder of all family members present at the time of the crime) committed by 19 young offenders (under 22 years old) between 1984 and 2000 in the USA. They found that the majority of the offenders were male Caucasians who were in conflict with their families. Some youths had a long history of drug abuse, and felt that they had been abused by their parents or parents' partners. The researchers also concluded that the majority of the killings had been planned by the offenders and that all victims were specifically targeted.

4. Mass murders and school shootings committed by JHOs

Studies looking at mass murder and school shootings by juveniles saw a sharp rise after a series of cases in the USA in the late 90s, and the Columbine High school massacre by Eric Harris and Dylan Klebold (18 and 17 years old) (Langman, 2009). Many studies focused on case studies (e.g., Leary et al., 2003; Langman, 2009), but an increase in empirical studies with larger samples was also observed. Most studies published after 2014 focused on school shooters more specifically, and one study looked at public mass shootings.

Using a sample of 88 US-based mass shooters (1982-2018), Lankford and Hoover (2019) compared younger offenders (under 18 years old) and older offenders on a number of characteristics. They found that the juvenile shooters were significantly more likely than their older counterparts to have abused animals during childhood, admit being influenced by previous mass attackers, acquire the weapons they used in the attack illegally, and commit school shootings.

Since 2014, a range of studies focused on the problematic relationships/interactions between the perpetrator and other individuals (e.g., peers (friends or girlfriends), teachers). These studies will be explored in this section. First, Rice and Hoffman (2015) argued that a dysfunctional relationship exists between school shooters and their mothers. They highlighted the case study of Adam Lanza, who killed 26 children and staff members at the Sandy hook elementary school in 2012, in Newtown, Connecticut. Prior to the school shooting, Lanza shot and killed his mother (Pilkington, 2013). Rice and Hoffman (2015) claimed young mass shooters in general may be “engulfed or feeling sexually overstimulated” by a mother, whilst needing a father figure to help them break away from the mother and grow psychologically (pp.183). However, only a few school shooters had killed their mother or another parent beforehand, so the Adam Lanza case may not be generalizable to all school shooters. The authors acknowledged that other factors may have contributed to the shooting, such as the detached relationship between Adam and his father, or Adam’s attachment to firearms.

There have been many studies looking at the characteristics of school shooters, as well as risk-factors approaches, that have been published (e.g., Wike & Fraser, 2009). Building on this body of knowledge, Vitz and Faria (2022) conducted a descriptive study looking at the psychosocial characteristics of 20 US-based adolescent mass school shooters. They found a series of negative offender background characteristics, such as being obsessed with violence, having issues within the family, and being depressed. The authors also found

an absence of protective factors, such as having a positive meaning (life goals, professional goals) or being involved in prosocial groups.

Two studies by Farr (2018, 2019a) considered masculinity issues in cases of school shootings, using a sample of US cases of school shootings by former or current students between 1995 and 2015. In Farr (2018), the researcher examined 29 shootings committed by 31 shooters (a minimum of 2 people were shot, with at least one not being specifically targeted) and divided the shooters into three groups: psychiatric disorders (shooters who have serious psychiatric problems); family turbulence offenders (spent most of their lives in extremely abusive families); situational volatility offenders (reacted with inappropriate/explosive anger to perceived unfair discrediting of their masculinity). Farr also found that offenders in each of these groups were not able to achieve perceived traditional masculine goals, such as “being cool”, “proving heterosexuality”, “repudiating femininity”, or “being tough”.

Additionally, romantic rejection shortly before the school rampage has been found to be an influential factor for young male shooters (Farr, 2019a; Vitz & Faria, 2022). Farr (2019a) reported that 15 of the 29 perpetrators in her US sample of male school shooters under 21 years old had experienced romantic rejection that led to anger. Perceived injustice, like romantic rejection or bullying by male peers, serves as a direct threat to the shooters’ masculinity (Farr, 2018; 2019a). Farr (2018) described the rampage as the offenders’ “ultimate performance” of masculinity to their peers, who they perceived as having treated the offenders unfairly. Farr (2019a) argued that romantic rejections and humiliations damaged these individuals’ social status at school due to the loss of “gender credibility”, with the only possible reaction to this perceived gendered injustice being the display of masculinity through violence.

Farr (2019b) examined a subsample of 10 mentally ill juvenile school shooters, who were tried and convicted as adults and sentenced to life imprisonment. The analyses focused on the characterization of psychiatric issues by the defense and prosecution. All 10 offenders were found to be suffering with depression, and all but one had anger management issues and suicidal ideation or attempts. Several offenders were also found to suffer from delusions and/or hallucinations, with three JHOs having a prescription for psychotropic medicines before or at the time of the murders. The defense argued that the offenders suffered from psychosis and schizophrenia in five of the cases, and major depressive disorder in an additional case. The author reported that although the defense provided evidence of mental illness for each offender, it was not sufficient to meet the standard of insanity or qualify as a mitigating circumstance, and these cases were processed in criminal Court.

Several classifications of school shootings/shooters were developed before 2014 (Faceted Model of School Assisted Homicide by Fritzon and Brun (2005) and the typology of school shooters by Langman, 2009). Similarly, a typology of school shooting characteristics was created by Gerard and her colleagues (2016), relying on an international sample of 28 cases of shooting incidents between 1988 and 2009. Using smallest space analysis, the researchers found four thematic regions: “impact” (e.g., offense was planned, more than three victims, offender committed suicide); “message” (delivering a message through clothing worn by the offender (combat gear) and actual verbal messages (video; threat delivered); “unrestrained” (engaging in out-of-control activities in relation to the shooting); and “targeting” (of specific individuals).

Gerard et al. (2016) also compared offenders who were 18 years of age or under with those over the age of 18 and found significant differences on a number of variables. The younger offenders were more likely to be depressed at the time of the shooting, to be from the

USA, to be a former or current student at the school targeted, to have made threats about their plans beforehand, and to have stolen weapons to carry the shooting.

5. Sexual Homicide by Juvenile Offenders

Perusal of the literature reveals two studies published since 2014 that included analyses related to characteristics of JHOs who committed sexually oriented homicides. Building on previous publications using more than 30 years of data from the FBI's SHR, several significant trends with respect to arrests of juvenile offenders for sexual homicide were observed by Myers and colleagues (2016). First, in contrast to adult sexual homicide offenders, the mean age of a juvenile offender arrested for sexual homicide did not significantly change throughout the period of 1976-2007. Second, juvenile offenders committed a much greater number of sexual homicides in the subperiod of 1976-1986 (n = 245), compared to the subperiod of 1998-2007 (n = 36). And third, the proportion of sexual homicides among juvenile-perpetrated homicides overall was five times higher in 1976-1986 than in 1998-2007. In other words, sexual homicides accounted for a much smaller proportion of all juvenile arrests for murder in the most recent subperiod of this study.

In the second study found on juvenile sexual homicide offenders (JSHOs), Chopin and Beauregard (2020) relied on data from a database tracking sexual homicides in France and Canada to investigate differences in victim and crime scene characteristics between male juvenile and adult SHOs. The sample consisted of sexual homicides spanning more than 70 years, and 16% of the offenders were juveniles. The researchers reported that compared to their adult counterparts, JSHOs were more likely to make contact with their victim in a residential area where there was a greater risk of detection, commit the homicide in an outdoor area, and target a child younger than 10 years of age. Conversely, JSHOs were less likely to target a female victim than the adult offenders in the sample.

Moreover, Chopin and Beauregard (2020) examined the heterogeneity among JSHOs, using latent class analysis (LCA). Based on victim-related and crime scene variables, four distinct classes of JSHOs were identified: (1) Explosive-opportunistic offenders (represented the highest proportion of JSHOs in the sample), (2) sadistic offenders, (3) offenders who were overcontrolled and also displayed evidence of anger, and (4) predatory offenders.

6. Legal Processing and Sentencing

Since 2014, three studies have empirically examined the legal processing and sentencing of offenders who were under the age of 18 when they committed a homicide. All three studies were conducted in the USA (Finholt, et al., 2020; Kokkalera, et al., 2021; Spooner & Vaughn, 2017). Two of the studies focused on life without the possibility of parole sentences for JHOs. In Spooner and Vaughn's (2017) research, the authors investigated sentencing requirements for juveniles convicted of murder across 52 U.S. jurisdictions, including the District of Columbia and the federal court system. They found that while some jurisdictions abolished life without parole (LWOP) sentences for JHOs following the Supreme Court's ruling in *Miller v. Alabama* (2012), the majority of jurisdictions (n = 29) permitted the sentencing of convicted juvenile murderers to LWOP. Two other notable findings were reported: (1) The inclusion of LWOP as a possible sentence was more common in states with a Republican-controlled legislature, and (2) JHOs represented a higher percentage of all homicide arrests in states that allowed them to be sentenced to LWOP.

In contrast to the study described above, Finholt and colleagues (2020) focused solely on LWOP sentences for juveniles convicted of murder in the state of North Carolina. More specifically, the researchers examined the characteristics and predictors of these sentences for JHOs in the state between 1994 and 2018. They reported that during this 25-year period, 94 juvenile murderers received a sentence of LWOP, the vast majority of whom (87%) were sentenced as such prior to 2010. Moreover, more than 60% of these sentences were found in

11 of the 100 counties in North Carolina. Lastly, LWOP sentences were significantly more likely to be given to juvenile offenders in counties with higher rates of poverty and African Americans; overall, 81% of JHOs who were sentenced to LWOP in this period were African Americans.

The remaining study in this category evaluated the application of felony murder laws (i.e., laws related to individuals who kill during the commission of a felony) to juvenile offenders (Kokkalera et al., 2021). The investigation by these researchers revealed that the majority of states (n = 28) automatically transferred juveniles who are accused of felony murder to adult court, in which they face long prison sentences. In 19 additional states, most juvenile offenders who are charged with felony murder are tried in adult court. Also, the majority of appeals of felony murder convictions against juvenile offenders filed after the *Miller v. Alabama* (2012) ruling have been unsuccessful.

7. Recidivism by JHOs

Since 2014, 17 studies have assessed recidivism outcomes in samples of JHOs. Four of these studies investigated the nature, prevalence, and/or correlates of recidivism among subtypes of JHOs (e.g., sexually oriented murderers), and they are reviewed first. Subsequently, the remaining 13 studies that examined recidivism in general samples of formerly incarcerated JHOs are discussed.

Subtypes of JHOs

Haerle (2016) conducted the only study published since 2014 to analyze the effects of a treatment program on recidivism in a sample with a high proportion of JHOs. The researcher aimed to assess the influence of participation in a treatment program in a Southern U.S. state on whether a violent juvenile offender had been rearrested over a three-year follow-up period. The sample consisted of 1,446 treatment participants (n = 277) and non-participants (n =

1,169), and more than 70% of treatment participants were convicted of a homicide offense. The results indicated that juvenile offenders who participated in the treatment program were significantly less likely to be rearrested. Furthermore, offenders who were exposed to more intensive treatment were significantly less likely to be rearrested, compared to those who received less intensive treatment.

The remaining three studies within this category were conducted with a sample of 59 male JHOs from a Southeastern US state who were incarcerated in adult prisons in the early 1980s. The follow-up period in these studies was approximately 30 years. In the first study, Khachatryan and colleagues (2016) focused on eight offenders in this sample who were classified as sexually oriented murderers. Six of the eight JSHOs had been released during the follow-up period, and four of them had recidivated. Three JSHOs were arrested for serious violent, property, and drug-related offenses, and were recommitted to prison; two of them experienced multiple recommitments to prison. The fourth recidivist was arrested for relatively minor offenses (e.g., DUI) and was not reincarcerated.

In a study by Khachatryan and colleagues (2016), this sample of 59 JHOs was divided into offenders who killed alone and those who killed with at least one accomplice. With respect to post-homicide outcomes, two significant differences emerged: first, group offenders were more likely to be released from prison during the follow-up period. Second, among the 48 JHOs who had been released, group offenders were more likely to be rearrested. Lastly, the JHOs in this sample who killed or attempted to kill a victim during the commission of a crime were compared to JHOs who committed a conflict-oriented homicide offense by Khachatryan and colleagues (2018). The researchers found no significant differences between the two groups on the likelihood of release from prison, recidivism overall, and violent recidivism.

Broad Samples of JHOs

Thirteen studies published since 2014 have examined recidivism and desistance in samples of juvenile or young homicide offenders more broadly who were released from correctional institutions, without focusing on any specific subtypes of homicide offenders. In three of these studies, JHOs were released from juvenile correctional facilities (Caudill & Trulson, 2016; Trulson & Caudill, 2017; Trulson et al., 2016). In nine studies, JHOs were released from adult prisons (Abrams et al., 2020; DiCataldo et al., 2017; Heide, 2019, 2020, 2021; Hubbell et al., 2022; Khachatryan & Heide, 2022; Khachatryan et al., 2016; McCuish et al., 2018). In the remaining study, JHOs were released from either juvenile correctional institutions or psychiatric hospitals (Remschmidt et al., 2014)

In a follow-up study of released JHOs from Germany, Remschmidt and his colleagues (2014) analyzed a sample of 114 JHOs, approximately 90% of whom were males. The authors reported that during the 13-year tracking period, close to 40% of JHOs had been rearrested for new crimes. Although half of the recidivists committed at least one violent crime following their release, the researchers noted that none of them committed a new homicide offense.

Recidivism by JHOs released from juvenile detention facilities in the state of Texas was investigated in several studies by Trulson, Caudill, and their colleagues. In the first study, Caudill and Trulson (2016) examined recidivism in a sample of 221 JHOs who were released from incarceration between 1987 and 2000. Over a follow-up period of 10 years, 58% of the sample had been rearrested. The authors reported that JHOs who committed violence against correctional staff members, served shorter sentences, and scored higher on a behavioral disruption scale were at a significantly higher risk of recidivism.

In the second study, Trulson and colleagues (2016) investigated the predictors of recidivism in a sample of 238 released JHOs. The researchers reported that 58% of JHOs had been rearrested within the five-year follow-up period. The risk of recidivism was higher for

JHOs who were male and Black, as well as those who committed assaults in prison and did not participate in an intensive treatment program.

In the third study by this group of researchers, Trulson and Caudill (2017) conducted a three-year follow-up study on 247 predominantly male JHOs who were sentenced to incarceration in 1987-2011 and subsequently released. Over the course of three years, 50% of the sample had been rearrested. Offenders were significantly more likely to be rearrested if they were Black, experienced childhood neglect, and assaulted other inmates while incarcerated. Conversely, they were significantly less likely to be rearrested if they served longer sentences.

Two of the studies in this category relied on the above-mentioned sample of 59 male JHOs from a Southeastern state who were sentenced to serve time in adult prison in the 1980s. Khachatryan (2016) tracked these JHOs' behavior up to 2012. Similar to the studies by these researchers reviewed in the previous section, the follow-up period for this study was approximately 30 years. The authors reported that 88% of the 48 JHOs released during the follow-up period (n = 42) had been rearrested, and 63% (n = 30) had been arrested for a new violent offense. Five of these violent recidivists committed a new homicide offense. Furthermore, JHOs who were incarcerated six years or less for the original homicide offense had significantly higher odds of rearrest for a new violent offense than JHOs who served seven years or longer in prison. Conversely, Hubbell and his colleagues (2022) found that scores on the Youth Level of Supervision/Case Management Inventory (YLS/CMI) risk assessment instrument were not significantly related to general or violent recidivism for the JHOs in this sample.

DiCataldo and colleagues (2017) examined the prevalence and correlates of recidivism in a sample of 22 JHOs released from adult prisons across the state of Massachusetts. The mean follow-up period in the study was approximately eight years, and in

contrast to the studies discussed above, the measure of reoffending was post-release convictions. The authors reported that seven of the 22 JHOs (32%) were reconvicted of another crime after their release. Interestingly, the recidivists and non-recidivists in the sample did not significantly differ on any of the variables tested by the researchers, including measures related to prior offense history, family history, mental health problems, and safety in the JHO's community.

In a Canadian study of recidivism among young offenders, McCuish and colleagues (2018) compared 26 young homicide offenders to young offenders who were convicted of a non-homicide violent crime (n = 358) and young offenders convicted of a non-violent crime (n = 139) on post-incarceration offending trajectories. The homicide offenders were between the ages of 12 and 19 when they were arrested. These offenders released from adult prison were tracked up to age 28. The findings indicated that 71% of the homicide offenders were reconvicted of a crime after their release, but they did not significantly differ from the other two groups on the likelihood of recidivism or post-release offending trajectories. Moreover, the young homicide offenders who recidivated tended to be reconvicted of non-violent crimes.

One of the only qualitative follow-up studies of JHOs published since 2014 was conducted by Abrams and colleagues (2020), and focused on juvenile (n = 8) and young adult (n = 2) homicide offenders from the state of California. These offenders were sentenced to a term of life in prison, but were subsequently released due to several resentencing laws passed in California. The offenders in the sample were incarcerated a mean of 29 years for the homicide offense, and had been in the community a mean of 15 months at the time of their interview. The authors argued that these homicide offenders had desisted from antisocial behavior while incarcerated, and identified three pathways to desistance: (1) Gradual steps toward desistance that were not induced by a particular adverse event, (2) desistance induced

by a particular adverse event, and (3) immediate desistance after incarceration. The meaning of desistance in this study was a change in identity and lack of participation in violent behavior and other types of misconduct in prison. None of the 10 sample subjects had been rearrested since their release from prison.

The remaining four studies in this category examined a sample of 22 male JHOs who were convicted of homicide offenses in the early 1980s and sentenced to serve time in adult prison. These men constituted a subgroup of the previously described sample of 59 JHOs. The data used in these studies spanned approximately 35 years. In the first study, Heide (2019) reported that 58% of the 19 released JHOs (n = 11) had been reincarcerated during the follow-up period. She found that JHOs were more likely to be reincarcerated if they went back to their old neighborhoods after their release, and less likely to be reincarcerated if they served longer sentences and completed a GED during their original incarceration term.

Subsequently, Heide (2020) presented data from a series of questions regarding the reasons for which the JHOs engaged in antisocial behavior generally in the early 1980s. Among the 18 JHOs for whom these data were available, offenders who lived in neighborhoods in which crime was routine in their youth and those who became involved in crime because the opportunity presented itself were significantly more likely to be rearrested and reincarcerated than the offenders who did not experiences these circumstances. In the third study, Heide (2021) found that various psychological (e.g., moral development, search for identity) and sociological (e.g., absence of informal social control, subcultural values) factors influenced the JHOs in the sample to engage in serious criminal behavior as children and adolescents. However, these factors had no significant effect on reincarceration.

Lastly, Khachatryan and Heide (2023) presented qualitative findings related to the 19 JHOs who had been released during the 35-year follow-up period. The authors noted that eight of the offenders had desisted from criminal behavior after their release, which meant

that they had not been rearrested for a serious violent or property crime, rearrested frequently for less serious crimes, or reincarcerated for any reason (including technical violations of parole/probation). Several dominant themes emerged in the lives of the desisters, which distinguished them from the 11 persistent offenders: avoidance of pre-incarceration neighborhood and friends, involvement in a positive marriage or live-in intimate relationship, stable full-time employment, demonstration of generativity (i.e., a willingness to help others, and particularly young people), and display of human agency, which reflected a deliberate choice made by the desisters to change and lead a prosocial life.

8. Summary of Key Points and Implications

As discussed above, more than 50 studies on homicide offenders aged 21 and under have been conducted since 2014 and fit the criteria to be included in this chapter. The vast majority of these studies focused on JHOs (murderers under the age of 18). Many of these studies have limitations such as methodological biases and small samples, but they are helpful in the effort of developing knowledge and understanding of this topic. Several conclusions can be drawn from the research findings presented throughout this chapter.

First, similar to the systematic review conducted by Gerard and her colleagues (2014), JHOs emerged as more likely to be males who grow up in disadvantaged circumstances, become exposed to violence at a young age, spend time with antisocial peers, exhibit poor academic performance, and engage in serious criminal behavior prior to the homicide offense. These findings highlight the need for more widespread implementation of secondary (designed for youth who are at risk for violence) and tertiary (designed for youth who have already engaged in violence) prevention programs, to inhibit these individuals from escalating to a homicide offense (Limbos et al., 2007). Programs that would help at-risk youth relocate to safer a neighborhood, develop prosocial coping skills, form relationships with prosocial peers, and improve their academic performance would be particularly

beneficial. An example of a program that has been shown to be effective in reducing recidivism and other negative outcomes for serious juvenile offenders is multisystemic therapy, which focuses on enhancing the communication between the juvenile and his/her family members, increasing the juvenile's participation in prosocial activities, and contributing to the improvement of the youth's academic performance (e.g., Van Der Stouwe et al., 2014).

Second, several studies published since 2014 have examined the heterogeneity among murderers 21 years old or younger, by classifying these offenders into various groups (e.g., Fox et al., 2021). These classification-based studies have demonstrated that the motivations behind youth-perpetrated homicides differ, depending on the offender. Accordingly, different strategies need to be implemented to prevent different types of homicide. For example, interventions that teach children or adolescents prosocial coping techniques or increase their frustration tolerance would be more beneficial for preventing conflict-oriented homicides (e.g., Blechman et al., 1994), while crime-oriented homicides would be better prevented through interventions that instill prosocial values and implement empathy training for youth (e.g., Hubner, 2005).

Third, more than five studies have been conducted on multiple-victim JHOs in recent years, investigating the risk factors for this subtype of homicide and the legal processing of the offenders. The scholarly interest in this topic is understandable, given the contemporary proliferation of mass shooting incidents in the USA (Schildkraut & Turanovic, 2022). The studies that focused on juvenile school shooters in particular once again emphasized the need for interventions that teach young people effective coping skills, similar to the discussion above. Children and adolescents, and especially those who exhibit a higher risk for violence, would benefit from learning to respond in a healthy manner to adverse circumstances such as bullying, romantic rejections, and perceived threats to one's masculinity.

Lastly, interest in the reintegration of JHOs to society after release from incarceration appears to have grown. As previously mentioned, there have been 13 studies to investigate post-incarceration outcomes in broad samples of JHOs since 2014. Prior to 2014, only four such studies had been published (e.g., Hagan, 1997). The current state of the evidence regarding recidivism among JHOs, based primarily on research from the USA, is that the majority of them are rearrested after they are released from adult prison or a juvenile correctional facility. Moreover, the important factors that have been found to contribute to recidivism are engaging in violence during incarceration, lack of exposure to treatment, serving a shorter sentence, returning to one's neighborhood of origin and spending time with antisocial peers after release, lack of stable employment, and the absence of a deliberate effort to change one's mindset and life.

The above-mentioned factors illustrate the importance of enrolling JHOs who have not been sentenced to LWOP in reentry programs, both during incarceration and following their release. These reentry programs can reduce the likelihood of reoffending by teaching JHOs essential job skills and prosocial methods of coping with frustration, as well as help the offenders avoid settling in their old neighborhoods after release. An example of a program that aims to address multiple aspects of reentry, such as adequate housing and employment, is the Serious and Violent Offender Reentry Initiative (SVORI). This program has been implemented in various US cities, and some research has found that participation in it reduces the likelihood of reoffending after release from incarceration (e.g., Lattimore & Visher, 2013). Additionally, it would be interesting to see if similar reentry trajectories are observed at the international level, and to compare the US justice systems that are more lenient with juveniles.

References

Adhia, A., Decou, C.R., Huppert, T., & Ayyagari, R. (2019). Murder–suicides perpetrated by adolescents: Findings from the national violent death. *Reporting System Suicide and Life-Threatening Behavior, 50* (2), 534-544. DOI: 10.1111/sltb.12607

Ahonen, L., Farrington, D.P., Loeber, R., Stallings, R., & Pardini, D. (2017). Childhood predictors of young homicide offenders and victims and their implications for interventions. In S. Bailey, P. Tarbuck. & P. Chitsabesan (Eds.), *Forensic Child and Adolescent Mental Health: Meeting the Needs of Young Offenders* (1st ed., pp.94-106). Cambridge University Press. https://doi.org/10.1017/9780511777127.010

Alonso, M., & Sottile. Z. (2023, March 24). *Florida teen sentenced to life in prison for fatally stabbing 13-year-old classmate*. CNN. https://edition.cnn.com/2023/03/24/us/aiden-fucci-sentencing-tristyn-bailey-stabbing/index.html.

Baglivio, M.T. & Wolfe, K.T. (2017). Prospective prediction of juvenile homicide/attempted homicide among early-onset juvenile offenders. *International Journal of Environmental Research and Public Health, 14*, 197, 1-13. doi:10.3390/ijerph14020197.

Blechman, E. A., Dumas, J. E., & Prinz, R. J. (1994). Prosocial coping by youth exposed to violence. *Journal of Child and Adolescent Group Therapy*, *4*(4), 205-227.

Brookman, F. (2005). *Understanding Homicide*. Sage: London

Carcach, C. (1997). Youth as victims and offenders of homicide. *Trends and Issues in Crime and Criminal Justice, 73,* 1-6.

Case, S., Johnson, P., Manlow, D., Smith, R., & Williams, K. (2021). *The Oxford Textbook on Criminology: Second Edition*. Oxford University Press: Oxford.

Caudill, J. W., & Trulson, C. R. (2016). The hazards of premature release: Recidivism outcomes of blended-sentenced juvenile homicide offenders. *Journal of Criminal Justice, 46,* 219-227.

Chopin, J., & Beauregard, E. (2020). Juvenile sexual murderers: Examination and classification of the crime□commission process. *Journal of Forensic Sciences, 65*(5), 1627-1637.

Cope, L. M., Ermer, E., Gaudet, L. M., Steele, V. R., Eckhardt, A. L., Arbabshirani, M. R., ... & Kiehl, K. A. (2014). Abnormal brain structure in youth who commit homicide. *Neuroimage: Clinical*, *4*, 800-807.

DeLisi, M., Piquero, A.R., & Cardwell, S.M. (2016). The unpredictability of murder: juvenile homicide in the pathways to desistance study. *Youth Violence and Juvenile Justice*, *14*(1) 26-42. DOI: 10.1177/1541204014551805

DiCataldo, F., Linder, C., Neddenriep, J., Christensen, M., Domas, S., & Kinscherff, R. (2017). The recidivism of juveniles convicted of homicide and released as adults. *Today's Children Tomorrow's Parents: Children Deprived of Liberty 2017*, *45*, 88-101.

Drybread, K. (2014). Murder and the making of man-subjects in a Brazilian juvenile prison. *American Anthropologist, 116*(4), 752-764.

Erbay, A. & Buker, H. (2019). Youth who kill in Turkey: A study on juvenile homicide offenders, their offenses, and their differences from violent and nonviolent juvenile delinquents. *Journal of Interpersonal Violence, 36*(15-16), 7326–7350. DOI: 10.1177/0886260519834088.

Farr, K. (2018). Adolescent rampage school shootings: Responses to failing masculinity performances by already-troubled boys. *Gender Issues, 35*, 73–97. https://doi.org/10.1007/s12147-017-9203-z.

Farr, K. (2019a). Trouble with the other: The role of romantic rejection in rampage school shootings by adolescent males. *Violence and Gender, 6*(3), 147-153. DOI: 10.1089/vio.2018.0046

Farr, K. (2019b). Lifetime punishments for mentally ill juvenile rampage school shooters: No hope for the future?. *Violence and Gender, 6*(3), 147-153. DOI: 10.1089/vio.2018.0046.

Farrington, D.P., Loeber, R., & Berg, M. (2012). Young men who kill: A prospective longitudinal examination from childhood. *Homicide Studies*, *16*(2), 99–128.

Fegadel, A. R., & Heide, K. M. (2015). Double parricide: An in□depth look at two victim homicides involving parents as victims. *Behavioral Sciences & the Law, 33*(6), 723-739.

Fox, J. A. (1996). *Trends in juvenile violence*. Washington, DC: US Department of Justice, Bureau of Justice Statistics.

Fox, B., Heide, K., Khachatryan, N., Michel, C., & Cochran, J. (2021). Juveniles arrested for murder: A latent class analysis of male offenders. *Behavioural Sciences and the Law, 39*, 470–491. DOI: 10.1002/bsl.2531.

Finholt, B., Garrett, B. L., Modjadidi, K., & Renberg, K. M. (2020). Juvenile life without parole in North Carolina. *Journal of Criminal Law & Criminology*, *110*, 141-179.

Fritzon, K., & Brun, A. (2005). Beyond Columbine: A faceted model of school-associated homicide. *Psychology, Crime & Law, 11*(1), 53–71. https://doi.org/10.1080/1068316042000209314

Gerard, F. J., Jackson, V., Chou, S., Whitfield, K. C., & Browne, K. D. (2014). An exploration of the current knowledge on young people who kill: A systematic review. *Aggression and Violent Behavior*, *19*, 559-571. doi:10.1016/j.avb.2014.07.002.

Gerard, F.J., & Browne, K. D., & Whitfield, K. (2017). Gender comparison of young people charged with murder in England and Wales. *International Journal of Offender Therapy and Comparative Criminology*, *61*(4), 413–429. DOI: 10.1177/0306624X15596387.

Gerard, F.J., Whitfield, K. & Brown, K. D. (2020). Exploration of crime-scene characteristics in juvenile homicide in the French-speaking part of Belgium. *Journal of Interpersonal Violence, 35*(13-14), 2399–2421. DOI: 10.1177/0886260517702489.

Gerard, F.J., Whitfield, K., Porter, L.E., & Browne, K. D. (2016). Offender and offence characteristics of school shooting incidents. *Journal of Investigative Psychology and Offender Profiling, 13*, 22–38. DOI: 10.1002/jip.1439.

Gokten, E.S. & Kilicoglub, A.G. (2015). Case report: An extreme homicide–suicide by a 12-year-old girl. *Aggression and Violent Behavior, 21*, 110–112. https://doi.org/10.1016/j.avb.2015.01.010.

Haerle, D. R. (2016). Dosage matters: Impact of a violent offender treatment program on

juvenile recidivism. *Youth Violence and Juvenile Justice, 14*(1), 3-25.

Hagan, M.P. (1997). An analysis of adolescent perpetrators of homicide and attempted homicide upon return to the community. *International Journal of Offender Therapy and Comparative Criminology, 41*(3), 250-259.

Heide, K. M. (1999). *Young Killers*. Thousand Oaks, CA: Sage Publications.

Heide, K. M. (2003). Youth homicide: A review of the literature and a blueprint for action. *International Journal of Offender Therapy and Comparative Criminology, 47*(1), 6–36.

Heide, K. M. (2015). Juvenile homicide: Trends, correlates, causal factors, and outcomes. In C. A. Pietz & Mattson (Eds.), *Violent offenders: Understanding and assessment* (pp. 127–150). Oxford U. Press.

Heide, K. M. (2019). Juvenile homicide offenders: A 35□year□follow□up study. *Behavioral Sciences & the Law, 37*(5), 493-511.

Heide, K. M. (2020). Juvenile homicide offenders look back 35 years later: Reasons they were involved in murder. *International Journal of Environmental Research and Public Health, 17*, 3932, 1-16. doi:10.3390/ijerph17113932

Heide, K. M. (2021). Juvenile homicide offenders: Why they were involved in serious crime. *Behavioral Sciences & the Law, 39*(4), 492-505.

Heide, K. M. (2022). Juvenile homicide in the United States: Sizing up the problem and moving forward. *Homicide Studies, 26*(1) 47–67. DOI: 10.1177/10887679211043802

Heide, K.M., & Petee, T.A. (2007). Parricide: An empirical analysis of 24 Years of U.S. data. *Journal of Interpersonal Violence, 22*(11), 1382-1399. DOI: 10.1177/0886260507305526

Heide, K. M., Roe-Sepowitz, D., Solomon, E. P., & Chan, H. C. (2012). Male and female juveniles arrested for murder: A comprehensive analysis of U.S. data by offender gender. *International Journal of Offender Therapy and Comparative Criminology, 56*, 356-384. doi:10.1177/0306624x11406418.

Heide, K. M. & Sellers, B. G. (2014). Girls arrested for murder: An empirical analysis of 32 years of U.S. data by offender age groups. *Behavioral Sciences & the Law*, *32*(4), 467-482. DOI: 10.1002/bsl.2130.

Heide, K., Michel, C., Cochran, J. & Khachatryan, N. (2020). Racial differences among juvenile homicide offenders: An empirical analysis of 37 years of U.S. arrest data. *Journal of Interpersonal Violence, 35*(11-12) 2111–2141. DOI: 10.1177/0886260517721173.

Hemenway, D. & Solnick, S.J. (2017). The epidemiology of homicide perpetration by children. *Injury Epidemiology, 4*(5), 1-6. DOI 10.1186/s40621-017-0102-2.

Holt, A. (2017). Parricide in England and Wales (1977–2012): An exploration of offenders, victims, incidents and outcomes. *Criminology & Criminal Justice*, *17*(5), 568-587.

Home Office (2022). *Collection Firearms*. Retrieved from https://www.gov.uk/government/collections/firearms.

Hubbell, J. T., Heide, K. M., & Khachatryan, N. (2019). Adopted children who kill their adoptive parents. *Behavioral Sciences & the Law*, *37*(5), 473-492.

Hubbell, J. T., Heide, K. M., & Khachatryan, N. (2022). Risk assessment and post-release recidivism in a sample of juvenile homicide offenders. *International Journal of Offender Therapy and Comparative Criminology*, *66*(8), 931-953.

Hubner, J. (2005). *Last chance in Texas: The redemption of criminal youth*. Random House Incorporated.

Khachatryan, N., & Heide, K. M. (2023). Juvenile homicide offenders: factors in desistance after incarceration. *International Journal of Environmental Research and Public Health*, *20*(3), 2354.

Khachatryan, N., Heide, K. M., & Hummel, E. V. (2018). Recidivism patterns among two types of juvenile homicide offenders: A 30-year follow-up study. *International Journal of Offender Therapy and Comparative Criminology*, *62*(2), 404-426.

Khachatryan, N., Heide, K. M., Hummel, E. V., & Chan, H. C. (2016). Juvenile sexual homicide offenders: Thirty-year follow-up investigation. *International Journal of Offender Therapy and Comparative Criminology*, *60*(3), 247-264.

Khachatryan, N., Heide, K. M., Hummel, E. V., Ingraham, M., & Rad, J. (2016). Examination of long-term postrelease outcomes of juvenile homicide offenders. *Journal of Offender Rehabilitation*, *55*(8), 503-524.

Khachatryan, N., Heide, K. M., Rad, J., & Hummel, E. V. (2016). Post□incarceration recidivism of lone versus group juvenile homicide offenders. *Behavioral Sciences & the Law*, *34*(6), 709-725.

Kokkalera, S. S., Strah, B. M., & Bornstein, A. (2021). Too young for the crime, yet old enough to do life: A critical review of how state felony murder laws apply to juvenile defendants. *Journal of Criminal Justice and Law, 4*(2), 90-107.

Langman, P. (2009). *Why kids kill: Inside the mind of school shooters*. New York: Palgrave MacMillan.

Lankford, A., & Hoover, K.B. (2019). Do the ages of mass shooters matter? Analyzing the differences between young and older offenders. *Violence and Gender, 6*(1), 11-15. DOI: 10.1089/vio.2018.0021.

Lattimore, P. K., & Visher, C. A. (2013). The impact of prison reentry services on short-term outcomes: Evidence from a multisite evaluation. *Evaluation Review*, *37*(3-4), 274-313.

Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: case studies of the school shootings. Aggressive Behavior, *29*, 202–214. DOI:10.1002/ab.10061.

Limbos, M. A., Chan, L. S., Warf, C., Schneir, A., Iverson, E., Shekelle, P., & Kipke, M. D. (2007). Effectiveness of interventions to prevent youth violence: A systematic review. *American Journal of Preventive Medicine*, *33*(1), 65-74.

Lo, T.W., & Tam, H.L. (2018). Working with Chinese triad youth gangs: Correct diagnosis and strategic intervention. *International Journal of Offender Therapy and Comparative Criminology, 62*(12), 3708–3726. DOI: 10.1177/0306624X18755482.

Marttunen, M. (2008). Juvenile criminal justice: comparative and criminal policy perspective on sanctioning juveniles. *National Research Institute of Legal Policy*, *236,* 451-464.

Maurer, J.M., Tirrell, P.S., Anderson, N.E., Rodriguez, S.N., Caldwell, M.F., Van Rybroek, G., J. & Kiehl, K.A. (2021) Dimensions of impulsivity related to psychopathic traits and homicidal behavior among incarcerated male youth offenders. *Psychiatry Research, 303,* 114094. https://doi.org/10.1016/j.psychres.2021.114094.

McCuish, E. C., Cale, J., & Corrado, R. R. (2018). A prospective study of offending patterns of youth homicide offenders into adulthood: An examination of offending trajectories and the crime mix posthomicide. *Youth Violence and Juvenile Justice*, *16*(1), 18-36.

Myers, W. C., Chan, H. C., & Mariano, T. Y. (2016). Sexual homicide in the USA committed by juveniles and adults, 1976–2007: Age of arrest and incidence trends over 32 years. *Criminal Behaviour and Mental Health*, *26*(1), 38-49.

Otto, N. (2020). 'I did what I had to do': Loyalty and sacrifice in girls' narratives of homicide in southern Brazil. *British Journal of Criminology, 60,* 703–721. DOI:10.1093/bjc/azz079.

Pilkington, E. (2013, November 25). Sandy Hook report – shooter Adam Lanza was obsessed with mass murder. *The Guardian*. https://www.theguardian.com/world/2013/nov/25/sandy-hook-shooter-adam-lanza-report.

Remschmidt, H., Martin, M., Niebergall, G., & Heinzel-Gutenbrunner, M. (2014). Violent Crime perpetrated by young people: Results of a 13-year longitudinal study of offenders on probation. *Deutsches Ärzteblatt International*, *111*(41), 685.

Rice, T.R., & Hoffman, L. (2015). Adolescent mass shootings: developmental considerations in light of the Sandy Hook shooting. *International Journal of Adolescent Medical Health, 27*(2), 183–187.

Richards, Y. & Keatley, D.A. (2022). Adolescent killers: Using two timeline methods to map life histories of adolescents that kill. *Deviant Behavior, 43*(8), 1005-1019. DOI: 10.1080/01639625.2021.1950516.

Rodway, C., Norrington-Moore, V., While, D., Hunt, I. M., Flynn, S., Swinson, N., Roscoe, A., Appleby, L., & Shawet, J. (2011). A population-based study of juvenile perpetrators of homicide in England and Wales. *Journal of Adolescence, 34*(1), 19-28.

Roe-Sepowitz, D. (2009). Comparing male and female juveniles charged with homicide: Child maltreatment, substance abuse, and crime details. *Journal of Interpersonal Violence*, *24*, 601-617. doi:10.1177/0886260508317201.

Schorr, M.T., Reichelt, R.R., de Carvalho Alves, L. P., de Borba Telles, B., Strapazzon, L., & de Borba Telles, L.E. (2019). Youth homicide: a study of homicide predictor factors in adolescent offenders in custody in the south of Brazil. *Trends in Psychiatry and Psychotherapy*, *41*(3), 292-296.

Sellers, B. G., & Heide, K. M. (2012). Male and female child murderers: An empirical analysis of U.S. arrest data. *International Journal of Offender Therapy and Comparative Criminology*, *56*, 691-714. doi:10.1177/0306624X11411152.

Smit, P., Jong, R. de & Bijleveld, C. C. J. H. (2012). Homicide Data in Europe: Definitions, Sources, and Statistics. In: M. C. A. Liem & W. A. Pridemore (eds.), *Handbook of European Homicide Research. Patterns, Explanations, and Country Studies.* (pp. 5-24). New York: Springer.

Schildkraut, J., & Turanovic, J. J. (2022). A new wave of mass shootings? Exploring the potential impact of COVID-19. *Homicide Studies*, *26*(4), 362-378.

Spooner, K., & Vaughn, M. S. (2017). Sentencing juvenile homicide offenders: A 50-state survey. *Virginal Journal of Criminal Law*, *5*, 130-170.

Trulson, C., & Caudill, J. (2017). Juvenile homicide offender recidivism. *Journal of Criminal Psychology*, *7*(2), 93-104.

Trulson, C. R., Haerle, D. R., Caudill, J. W., & DeLisi, M. (2016). *Lost causes: Blended sentencing, second chances, and the Texas Youth Commission*. Austin, TX: University of Texas Press.

Van der Stouwe, T., Asscher, J. J., Stams, G. J. J., Deković, M., & van der Laan, P. H. (2014). The effectiveness of multisystemic therapy (MST): A meta-analysis. *Clinical Psychology Review*, *34*(6), 468-481.

Vitz P. C. & Faria A. A. (2022). The absence of positive psychosocial characteristics in the lives of mass school shooters. *Journal of Police and Criminal Psychology*, *37*, 17–37. https://doi.org/10.1007/s11896-020-09413-y.

Viñas-Racionero, R., Schlesinger, L.B. & Scalora, M.J. & Jarvis, J.P. (2017). Youthful familicidal offenders: Targeted victims, planned attacks. *Journal of Family Violence, 32*, 535–542. DOI 10.1007/s10896-016-9836-9.

Walsh, J.A. & Krienert, J.L. (2014). My brother's reaper: Examining officially reported siblicide incidents in the United States, 2000–2007. *Violence and Victims, 29*(3), 523-540. http://dx.doi.org/10.1891/0886-6708.VV-D-13-00032.

Welfare, H.R. & Hollin, C.R. (2015). Childhood and offense-related trauma in young people imprisoned in England and Wales for murder and other acts of serious violence: A descriptive study. *Journal of Aggression, Maltreatment & Trauma, 24*(8), 955-969. DOI: 10.1080/10926771.2015.1070230

Wiese, R., Calcena, E., Aramayo Criniti, A., Catanesi, C., & Folino, J. (2019). Psychosocial factors and juvenile homicide in Argentina. *International Journal of Offender Therapy and Comparative Criminology*, *63*(10), 1952-1967-1970. DOI: 10.1 177/0306624X 19837677.

Wike, T. L., & Fraser, M. W. (2009). School shootings: Making Sense of the senseless. *Aggression & Violent Behavior, 14*, 162-69.