

Not so Random Acts of Violence: Shared Social–Ecological Features of Violence Against Women and School Shootings

Nicole L. Johnson¹, Natania S. Lipp¹, Marli Corbett-Hone¹, and Peter Langman²

¹ Department of Education and Human Services, Lehigh University

² Drift Net Securities, Chicago, Illinois, United States

The present study examines an understudied potential warning sign of school shootings: violence against women (VAW). Utilizing the social–ecological model of violence prevention, we employed directed content analysis to determine the prevalence of acts and social–ecological features of VAW among profiles of 59 boys/men who perpetrated school shootings between 1966 and 2018. The majority of shootings profiled occurred in the United States (47, 79.7%), followed by Canada (five, 8.5%), Finland (two, 3.4%), Germany (two, 3.4%), Brazil (one, 1.7%), Scotland (one, 1.7%), and Ukraine (one, 1.7%). Results demonstrated a strong presence of VAW among profiled school shooters, with almost 70% perpetrating VAW and the identification of frequent features of VAW that cut across the social–ecological levels, most notably (the enactment of and failure to meet expectations of) hegemonic masculinity and normalization of violence. Implications for research and intervention are discussed.

Public Significance Statement

Nearly 70% of profiled school shooters perpetrated acts of violence against women, including intimate partner violence and sexual assault. Thus, violence against women and its related social–ecological features, including hegemonic masculinity (e.g., expectations of toughness, antifemininity, and status among men, as well as the failure to meet these expectations) and normalization of violence (e.g., ignoring everyday acts of violence), are critical avenues for intervention in the prevention of school shootings.

Keywords: violence prevention, gun violence, violence against women, mass murder

School shootings are a major public health issue in the United States. Between 2000 and 2017, 143 children were killed in active shooter incidents (Oudekerk et al., 2019). Since 2018, 176 additional school shootings have occurred, resulting in 152 injuries and 74 deaths (Gun Violence Archive, n.d.). These numbers, however, do not account for everyone affected by school gun violence as survivors of mass shootings are at higher risk for mental health concerns such as posttraumatic stress disorder, depression, anxiety, and substance abuse (Novotney, 2018).

With the rise in school shootings, some have tried to detect warning signs that might prevent future incidents. To date, no common set of characteristics appear to encompass school shooters. The United States Secret Service and Department of Education (2004) recommended that school officials identify student behaviors, such as voicing intent to hurt others, posting inappropriate messages,

or having access to weapons. Building on this recommendation, the present study examines another potential warning sign of school shootings: violence against women¹ (VAW).

The relationship between school shootings and VAW remains understudied. Researchers have pointed to the relationship between hegemonic masculinity and school shootings (e.g., Dragowski & Scharrón-del Rio, 2014; Kellner, 2013; Klein, 2005, 2006; Langman, 2017; Levant, 2022; Newman, 2004; Vito et al., 2018), but few have focused on the role of VAW, as a correlate of hegemonic masculinity, in school shootings. Silva et al. (2021) created a “gender-based” typology for mass shooters to examine the qualities of shooters with gender-related motivations (e.g., domestic violence, rejection from a female partner). Thirty-four percent were deemed to be motivated by gender and, compared to non-gender-based shooters, these shooters were more likely to have a history of domestic violence (Silva et al., 2021). The overlap with domestic violence points to VAW as both a warning sign and motivator for mass shootings.

Media coverage of shootings has increasingly supported connections between mass shooting perpetration, masculinity, and VAW. For instance, in 2019, a 24-year-old man killed nine people in a bar in Dayton, Ohio. Afterward, the police, who previously had no record

This article was published Online First June 29, 2023.

Nicole L. Johnson  <https://orcid.org/0000-0002-9519-2150>

Natania S. Lipp  <https://orcid.org/0000-0002-3981-3274>

Marli Corbett-Hone  <https://orcid.org/0000-0003-1236-4007>

The authors have no conflicts of interest to disclose.

Correspondence concerning this article should be addressed to Nicole L. Johnson, Department of Education and Human Services, Lehigh University, 111 Research Drive, Bethlehem, PA 18015, United States. Email: nij316@lehigh.edu

¹ The research and public record to date do not clarify whether their categorization of women includes transgender women. The authors believe it is likely that the category “woman” is often used to reference only cisgender women.

on this person, found he was suspended in high school for creating a “rape list” of girls he wanted to assault (Murphy et al., 2019). In line with Silva et al.’s (2021) mass shooting analyses, it is also apparent that girls/women are often the targets of school shootings. Between 1996 and 2002, girls were targeted in 11 out of 13 high-profile school shootings in the United States (Klein, 2006). While some posit that the normalization of certain acts of VAW may allow violence to escalate, this theory has not been empirically examined. As such, the present study reviews the most comprehensive database of profiles to date to determine how often shooters targeted girls/women, whether before or during their attacks. In addition, we examined social–ecological features of VAW in school shooters to determine how these acts of violence might connect.

Defining Violence Against Women

VAW involves “any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women” (United Nations, 1993). VAW exists on a continuum of interconnected behaviors ranging from extreme and aberrant (e.g., intimate partner homicide) to relatively minor and normalized (e.g., catcalling, Leidig, 1992). Even experiences of VAW that are considered “minor” on this continuum are damaging and have cumulative effects on women. Furthermore, these damaging acts contribute to a culture that condones violence. Understanding the relationship between school shootings and VAW occurring at all levels of the continuum might facilitate creating targeted interventions for perpetrators, victims, and bystanders of VAW. For example, recognizing and addressing more minor and/or normalized types of VAW might prevent escalation of violence (e.g., gender-based mass violence). In turn, a better understanding of VAW and the underlying features that allow it to occur might provide a clearer path for preventing school shootings. While many associated warning signs might exist, such as generally aggressive behavior or access to guns (Bushman et al., 2018), the focus on VAW highlights an area that is understudied, and whose exclusion often perpetuates the normalization of the violence.

Social–Ecological Features

Within this continuum of VAW, researchers have worked to identify common underlying features. Heise’s (1998) seminal integrated framework posits that empirical predictors of VAW emerge at multiple social–ecological levels, including individual and cultural. The Centers for Disease Control and Prevention (CDC, n.d.) extended this model to inform violence prevention, highlighting the influence of individual-, relationship-, community-, and societal-level features. The individual level includes biological and/or developmental history factors (e.g., a perpetrator’s history of victimization). The influence of those close to the perpetrator, including their family and friends, make up relationship-level factors (e.g., peer support of violence). Community-level factors include the impact of settings such as schools and neighborhoods (e.g., school tolerance of VAW). Finally, societal-level factors include broader policies/beliefs, including cultural norms/expectations (e.g., expectation of hegemonic masculinity).

Beyond identifying predictors of VAW, researchers have also attempted to identify factors that explain men’s violent behavior as a whole. At the base of this theorizing is the observation that despite

representing less than half of the human population, men perpetrate the overwhelming majority of violent behavior (Fleming et al., 2015). Relevant to the present study, school shootings are no exception, with men perpetrating 97% of school shootings over the past 40 years (Schmuhl & Capellan, 2020). With such disproportionate culpability for violent behavior attributed to men, scholarship has focused closely on the foundational role that gender plays on men’s perpetration of violence (Marganski, 2019). With this understanding, researchers posit that men’s violence, whether directed against women, other men, or gender expansive individuals, is grounded in the same social–ecological root causes: hegemonic masculinity and a culture that normalizes and perpetuates violent behavior (e.g., Fleming et al., 2015; Marganski, 2019; Pease, 2021). Even so, minimal work has examined how the factors that predict men’s VAW and/or men’s violence at large may also relate to school shooting behavior as a particular form of violence. In the remainder of this review, we will provide support for potential predictors that VAW and school shootings hold in common.

Hegemonic Masculinity

A limited, but growing, body of research examines how both hegemonic masculinity and exposure to violence apply to school shootings (Klein, 2005, 2006; Levant, 2022; Vito et al., 2018). Hegemonic masculinity refers to an enduring set of cultural norms, reinforced by gender socialization, that support men’s dominance and women’s subordination within society (Connell, 1987). On a societal level, hegemonic masculinity is associated with gender inequality and patriarchal systems of maintaining gendered hierarchies of power and control (Messerschmidt, 2019). While there are multiple masculinities, conformity to Western, White, cisgender, and heterosexual cultural norms and expectations of masculinity impact most, if not all, individuals as “gender role norms from the most dominant powerful group in a society [or globally] affect the experiences of persons in that group, as well as in all other groups” (Mahalik et al., 2003, p. 5). The colonized world has made this a global societal phenomenon rather than a localized issue (e.g., specific to the United States). In these societies, men encounter and often internalize a variety of interrelated gender role norms that perpetuate the enactment of hegemonic masculinity, including norms that men should emphasize expression of dominance, toughness, heterosexual prowess, and independent physicality while limiting expressions of emotions (with the exception of anger) and any resemblances to femininity or homosexuality (Levant et al., 2010).

On the individual level, men may struggle to maintain these gendered societal expectations, given their rigidity and the “precarious” nature of manhood requiring “continual social proof and validation” (Vandello et al., 2008, p. 1325). When men are perceived, by self or others, to fail at maintaining this hegemonically masculine status, men can experience masculine gender role discrepancy strain (Eisler et al., 1988; Pleck, 1981). A variety of personal experiences can trigger masculine gender role discrepancy strain, including situations where a man feels physically or intellectually inferior, is placed in positions of subordination to women, or struggles to maintain emotional inexpressiveness (Eisler et al., 1988). Within this cultural system, men who experience such threats to their masculinity may be more inclined to respond with violence—a chief strategy for achieving and maintaining social dominance and power, both toward nondominant groups (e.g., women, nonbinary individuals) and also toward

other men (Fleming et al., 2015) in order to prove their manhood, consistent with precarious manhood (Vandello et al., 2008). Though men often have other options for proving their manhood, violence is argued to be chosen frequently because of its high visibility as a symbol of masculinity (Smith et al., 2015). Thus, while hegemonic masculinity sets the tone for how men should act to prove their manhood, individual factors such as one's perceived threat to their masculinity and the distress they experience as a result contribute to their ongoing enactment and escalation of masculinity. Indeed, research concurs that men with high levels of masculine gender role strain demonstrate higher levels of intimate partner violence (IPV), antifemininity, and gender role rigidity (Baugher & Gazmararian, 2015).

In relation to our focus on school shootings as a unique form of violence, only a few researchers have examined the role hegemonic masculinity, and adjacent constructs of masculine gender role discrepancy strain and precarious manhood, may play in school shootings. Among these, Madfis (2017) suggested that cumulative strain theory helps explain why perpetrators intentionally choose school shootings, noting that historical evidence suggests that these perpetrators are often individuals who "have felt profoundly disempowered and emasculated ... [and] perceive that their commission of an infamous and widely-reported school attack with significant firepower and large body counts will regain their lost sense of masculinity, superiority, and power" (p. 25). Existing exploratory research suggests that masculine gender role discrepancy strain due to romantic rejection and general difficulties relating with women and girls have been frequent catalysts of school shooting perpetration (Klein, 2005, 2006).

Furthermore, some have identified gun violence as one avenue to perform masculinity. Levant (2022) theorized the role of "threatened masculinity" (encompassing gender role discrepancy strain and precarious manhood, as well as other related constructs) in gun violence among men, including school shootings, particularly highlighting the role of internalized shame. He states, "Boys who were treated this way [punished for violating masculine norms] might grow up to be men for whom a threat to their masculinity is just unbearable and requires an extreme forceful response, such as gun violence" (p. 158). Consistently, in an exploration of the relationship between precarious manhood and gun ownership, Borgogna et al. (2022) found that threats to men's masculinity predicted their interest in firearms. Because guns symbolize many tenets of hegemonic masculinity, such as aggressiveness and domination, gun ownership may provide some relief to distress caused by gender role strain (Borgogna et al., 2022). Although Heise (1998) reminded that no single predictor can fully explain violence, many of the additional predictors of VAW, such as normalization of violence, are empirically related to and/or products of hegemonic masculinity.

Cultural Acceptance of Violence

Violence begets violence. As violence increases within social contexts, violent behaviors tend to become normalized and, to some degree, are implicitly or explicitly sanctioned as strategies for maintaining social status (e.g., one's dominant masculinity) and for resolving interpersonal conflict (Heise, 1998). This relationship plays out on the cultural stage and in individuals' life experiences: Individuals who are exposed to violence, whether directly (e.g., via abuse victimization) or indirectly (e.g., witnessing violence), are at

greater risk of perpetrating violence, both in general and against women specifically (CDC, n.d.; Heise, 1998). Regarding VAW, exposure to VAW normalizes this as a socially sanctioned aspect of men's interactions with women. When it comes to shootings, Marganski (2019) urged the consideration of the cultural normalization of gun violence, where "guns are symbolic of strong-armed masculinity as seen in television, movies, video games, and even politics (Katz & Earp, 2013) and used to prove that" (p. 8).

Violence Against Women and School Shootings

The extant literature provides some support for the suggestion that prior personal history of perpetrating VAW may act as a warning sign for more large-scale violent acts (such as school shootings) and may be a point of intervention to decrease future VAW, including gender-based mass violence. Indeed, Marganski (2019) found that among the 18 mass murders with four or more fatalities in 2018, the majority of perpetrators had a history of perpetrating VAW. Similarly, Issa (2019), examining the claim that mass shootings are correlated with domestic violence, found that eight mass shooters had perpetrated VAW, such as domestic violence, rape, or sexual harassment. An explanation consistent with precarious masculinity (Vandello et al., 2008) and masculine gender role discrepancy strain (Pleck, 1981) might suggest that shooters' prior VAW perpetration was deemed insufficient to compensate for perceived threats to their masculinity, resulting in an escalation from private to public, large-scale violence to prove their manhood.

While both VAW and school shootings are likely perpetuated by the same social-ecological features, VAW is likely to precede school shootings for several reasons. First, VAW is normalized and thus often not confronted until more "serious" events occur (Klein, 2006). Second, VAW often does not follow school shootings, as perpetrators frequently die during the attack or are imprisoned, limiting their ability to enact further VAW (Langman, n.d.).

The Present Study

In summary, research has moved beyond examining the individual-level factors that predict school shootings to examine how larger social-ecological—and arguably much more influential—factors appear to influence this dramatically violent behavior. Investigation of and theories around school shootings provide preliminary evidence to support a theory that major predictors of VAW are simultaneously influential predictors of school shooting perpetration. To lend further support to this theory, we examined the details of school shooters' personal histories and social contexts within this framework of VAW. Our goal was to provide much-needed attention to the interrelated role of gender socialization and VAW within many school shooters' lives. To this goal, we examined two interrelated lines of inquiry: (a) What social-ecological features characterize boys and men who perpetrate school shootings? (b) What role does VAW play in boys' and men's perpetration of school shootings?

Method

Sample

A database of 63 individuals who perpetrated school shootings between 1966 and 2018 was created for this study. School shooters were included within this database if there were substantial publicly

available data to analyze their content related to VAW. Availability of data was drawn from Langman's (2009, 2015, 2016, 2017, n.d.) extensive published and unpublished profiles of school shooters as well as supplemental publicly available online sources (e.g., news articles, court documents). To increase the number of school shooters in the database, completed, attempted (e.g., active shooting incidents), and failed (e.g., those involving no deaths or injuries) school shooters were included. Furthermore, while the majority of analyzed school shootings occurred within the United States ($n = 51$, 81%), school shootings in other countries were included (i.e., Brazil, Canada, Finland, Germany, Scotland, Ukraine). Demographic information of individuals who committed school shootings included in this sample is detailed in the Results section and Table 1 below.

Content Analysis

The present study utilized directed content analysis to deepen our understanding of the connection between VAW and school shooting behavior via the exploration of shared social-ecological features. A directed content analysis was chosen, as prior to beginning analyses, the authors reviewed the existent research on school shootings and VAW and identified a framing theoretical lens, the social-ecological model of violence (CDC, n.d.; Heise, 1998), which guided initial coding categories (Hsieh & Shannon, 2005). Next, the authors determined their sources of analysis, highlighted above. Based on theory and research, the authors explored the following research questions: (a) What social-ecological factors characterize boys and men who perpetrate school shootings? (b) What role does VAW play in boys' and men's perpetration of school shootings?

Initial operational definitions were created for VAW, hegemonic masculinity, and cultural normalization of violence. After establishing initial categorical definitions, the first three authors met weekly as they reviewed profiles to establish, define, and clarify codes. Next,

the authors engaged in open selective coding by independently reviewing the profiles and keeping memos about potential categories and conceptual ideas (Plummer & Young, 2010). During the authors' meetings, they discussed their understandings to identify similarities and discrepancies and to finalize definitions. After finalizing all definitions, a codebook was created. The coders then reexamined shooter profiles utilizing the codebook in pairs to establish reliability. When discrepancies were identified, the third coder reviewed the content, and the discrepancy was discussed until consensus for each profile was established. Then, the authors engaged in theoretical coding, in which the relationship between codes was examined to integrate into a cohesive theory (Plummer & Young, 2010) resulting in the separation of hegemonic masculinity into two categories: the enactment of hegemonic masculinity and threatened masculinity (see Figure 1 for final codes).

Results

Demographics

Of the shooters profiled, the overwhelming majority identified as men/boys ($n = 59$, 93.7%). Given the proposed influence of gender and the minimal representation of nonmale shooters, the four women originally included in the database were removed from subsequent analyses, resulting in a final sample of 59 male shooters. The majority were White ($n = 36$, 61%) and were not immigrants to the country where they committed the shooting ($n = 50$, 84.7%). The average age of those profiled was 23.40 ($SD = 11.17$). Thirty-one (52.5%) were secondary school shooters, who were enrolled/recently enrolled in the middle/high school at the time of the shooting, 13 (22%) were college school shooters, and 15 (25.4%) were aberrant adult shooters with no current/recent connection to the school they attacked. See Table 1, for additional demographic information.

Perpetration of Violence Against Women

The majority of shooters reviewed (42, 71.2%) had documented instance(s) of perpetrating VAW. Victims included intimate partners, peers, and family members. Many instances of VAW occurred prior to the shooting (26, 44.1%), identifying VAW as a potential precursor to shootings and therefore a target for intervention. The most prevalent forms of VAW are codified below.

Stalking

Seven (11.9%) of the shooters reviewed had a documented history of stalking girls/women. Stalking was defined as engagement in repeated following or harassing another person in person or via technology. For example, the Simon's Rock College shooter, prior to the shooting, "gave a female student unwanted attention, to the point she told her faculty advisor and [the shooter] was told to leave the woman alone" (Langman, 2015, p. 108). Others reported that girls felt "stalked and harassed" (p. 108) by this shooter.

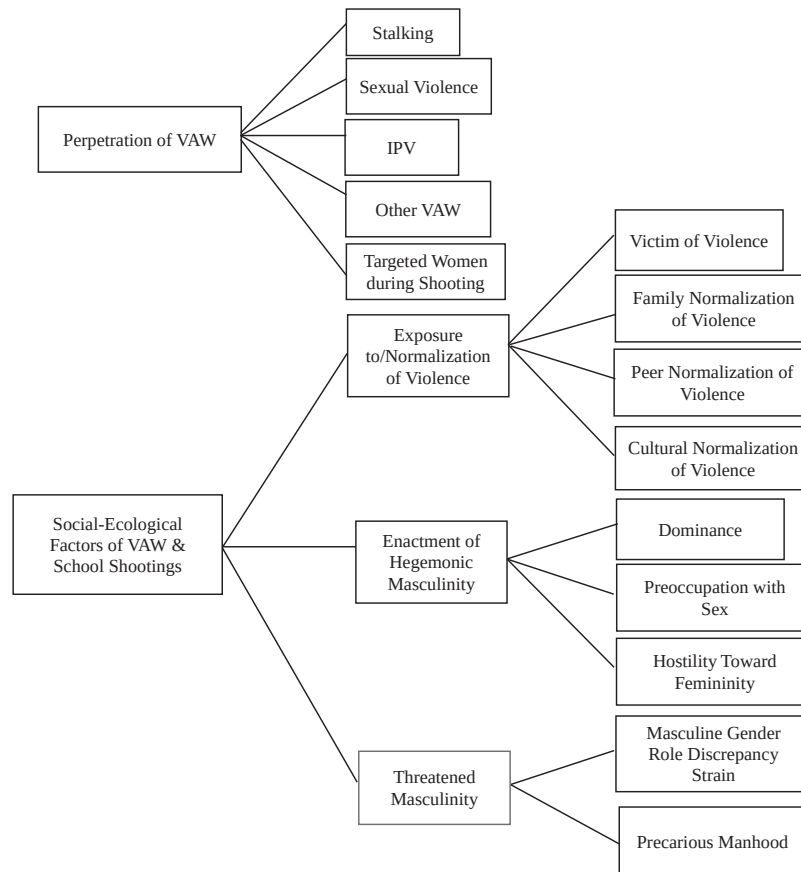
Sexual Violence

Seven (11.9%) of the shooters reviewed had a documented history of perpetrating sexual violence against girls/women. Sexual violence was defined as any unwanted sexual attention including rape, coercive sexual behavior, and sexual harassment. Of note, two

Table 1
School Shooter Demographics

Variable	<i>n</i>	%
Race/ethnicity		
White	36	61
Asian	7	11.9
Multiracial	6	10.2
Black	4	6.8
Latinx	4	6.8
Indigenous to the United States	2	3.4
Immigrant to country of shooting		
Yes	9	15.3
No	50	84.7
Shooter died during attack		
Yes	31	52.5
No	28	47.5
Type of school shooter		
Secondary	31	52.5
Aberrant	15	25.4
College	13	22
	Range	<i>M (SD)</i>
Age of shooter	11–62	23.40 (11.17)
Killed during shooting	0–32	5.63 (6.66)
Injured during shooting	0–70	7.90 (11.08)

Figure 1
Coding Tree



Note. VAW = violence against women; IPV = intimate partner violence.

shooters perpetrated sexual violence on the day of their attacks, and both had a prior history of sexual violence. One of them, the St. Pius X High School shooter, had a history of sexually harassing girls (e.g., making obscene phone calls) and a preoccupation with sex including fantasies of rape. On the day of the shooting, he handcuffed a girl named Kim Rabot “to his bed, raped her, and stabbed her to death” (Langman, 2015, p. 12).

Intimate Partner Violence

Five (8.5%) of the shooters reviewed had a documented history of perpetrating IPV. IPV was defined as any physical, psychological/emotional, or sexual violence against one’s romantic partner(s). The University of Texas shooter had a history of beating his wife. In fact, she reported to her parents that she believed he could kill her. On the day of the shooting, he first killed his mother and his wife before moving to the school (Langman, 2015).

Other VAW

Nine (16.7%) of the shooters reviewed had a documented history of forms of VAW not captured above. This code includes a wide range of behaviors including physical, psychological, or emotional

violence against female family members (e.g., mother, sister) or nonintimate girls/women at school. The most common behavior within this category was threat of harm, including death. Many shooters in this code perpetrated violence against multiple girls/women in their lives. For example, the Parker Middle School shooter was overheard, prior to the shooting, talking about killing his mother *and* he threatened to kill a girl who turned him down for a date (Langman, 2009, 2015).

Targeted Women During Shooting

In addition to the VAW perpetrated prior to the day of the shooting, over half of the shooters, 31 (52.5%), purposefully targeted women as victims in their attacks: 26 (44.1%) of these targeted specific women in their attacks (i.e., identified women they wanted to kill prior to the shooting), seven (11.9%) targeted women as a group of individuals, and six (10.2%) targeted their mothers. Shooters who targeted specific victims during their shootings frequently targeted “girls who rejected the shooters, rather than bullies who beat them up” (Langman, 2009, p. 12). The Rose-Marr College of Beauty shooter considered perpetrating a shooting at his high school but instead targeted a location with a disproportionate representation of women: a cosmetology school (Langman, n.d.). In a

highly publicized shooting targeting women, the University of California at Santa Barbara (UCSB) shooter wrote of his obsession with blonde women and, as such, targeted the Alpha Phi sorority, as he believed it was “full of hot, beautiful blonde girls” (Shortridge, 2014).

Social–Ecological Features of VAW and School Shootings

The authors identified three overarching categories, consistent with theory and research on social–ecological factors of VAW, and seven underlying codes (see Figure 1). The first category was (1) exposure to/normalization of violence, with four underlying codes: (a) victim of violence, (b) family normalization of violence, (c) peer normalization of violence, and (d) cultural normalization of violence. The second category was (2) enactment of hegemonic masculinity, with three underlying codes: (a) dominance, (b) preoccupation with sex, and (c) hostility toward femininity. The third category was (3) threatened masculinity, with two underlying codes: (a) masculine gender role discrepancy strain and (b) precarious manhood.

Exposure to/Normalization of Violence

Over half of the shooters, 34 (57.6%) had a documented history of experiencing or witnessing violence, and/or the utilization of violence was normalized among their family and/or peers. Consistent with the social–ecological model of violence (CDC, n.d.; Heise, 1998), close relationships and sociocultural norms influence one’s behavior. Therefore, individuals who experienced/witnessed violence or grew up in an environment that was supportive of violence are more likely to perpetrate violence. The current results demonstrate that this normalization of violence may be generalized across forms of violence, as although some shooters had direct exposure to shootings (e.g., the Bethel High School shooter whose father went on an armed rampage when the shooter was 5 years old, Langman, 2015) and/or direct support of their plan to perpetrate a shooting (e.g., the Dawson College shooter’s friend vowed to commit a school shooting following his shooting, Langman, 2015), the majority of shooters experienced the normalization of violence more broadly, including witnessing VAW. The most prevalent ways this showed up in the shooters’ histories are codified below.

Victim of Violence. Thirty (50.8%) shooters were categorized within the code victim of violence. Twenty-four shooters (40.7%) had documented histories of experiencing violence, most frequently perpetrated by their caregivers. Shooters were often victims of physical (e.g., hitting, choking, burning; 19, 32.2%), psychological/emotional (e.g., neglect, belittling, threatening; 18, 30.5%), and/or sexual (e.g., rape, sexual coercion; 9, 15.3%) abuse. Additionally, six shooters (10.2%) had experienced homophobic harassment or bullying due to perceived or actual marginalized sexual orientation (e.g., gay, bisexual). Finally, an additional six (10.2%) shooters had inconsistent or less clear histories of abuse; however, given the underreported nature of abuse, these reports were included. Furthermore, these shooters felt victimized, which we believe is an important mechanism for intervention, as it appears to be a potential contributor to the perpetration of school shootings.

Family Normalization of Violence. Twenty-five (42.4%) shooters had documented exposure to the normalization of violence within their family. Family normalization of violence was defined as having family member(s) who condoned or perpetrated violence (e.g.,

VAW, domestic violence, community violence) or early and recurrent exposure to violent means (e.g., guns) by family member(s). For example, the Westside Middle School shooter was given a rifle for his sixth birthday and “drew a picture of two rifles when asked to draw something that symbolized his family” (Langman, 2009, p. 22). Within this category, the majority (20, 33.9%) witnessed domestic violence within the home; this included violence between caregivers or other family members. For example, the East Carter High School shooter witnessed his father abuse his mother on numerous occasions (Langman, 2015).

Peer Normalization of Violence. Eighteen (30.8%) shooters had documented exposure to the normalization of violence within their peer group. Peer normalization of violence was defined as having friends or other peers who condoned or perpetrated violence (e.g., VAW, bullying, community violence), including situations in which peers encouraged the shooting itself. One example is the Columbine High School shooters, who normalized violence for each other by acting together in the shooting and frequently endorsing admiration for Hitler and neo-Nazis (Langman, 2009, 2015). Additionally, the Santana High School shooter stated that he had spoken to several peers about committing the shooting prior to the attack and was laughed at and ignored by many and even encouraged and baited by some (Langman, n.d.).

Cultural Normalization of Violence. While everyone is arguably influenced by cultural norms, 38 (64.4%) shooters had specific documentation of the impact of cultural normalization of violence. Cultural normalization of violence was defined as the acceptance of violence expressed through media depictions of violence (both fictional and nonfictional) and institutional regulations/policies. A demonstration of acceptance of violence through media is the cultural obsession with true crime, often glamorizing or gamifying violent crime. Many shooters (29, 49.2%) explicitly expressed fascination with media coverage of prior murderers, including school shooters. Two fictional depictions of violence came up multiple times in shooter histories: the film *Natural Born Killers* and the book *Rage* (Langman, 2009, 2015). Both sources of media graphically depict violence and highlight violence as a mechanism of achieving power, even if only temporarily. Additionally, several shooters (17, 28.8%) endorsed identity-based hatred (e.g., anti-Semitism, racism, heterosexism), which is based on cultural norms of marginalization and oppression. Another common identity-based hatred, consistent with the targeting of girls/women outlined above, is sexism. The École Polytechnique shooter expressed opposition against women achieving equality with men, stating that movements aimed at this (i.e., feminism) ruined his life. During the shooting, he separated women and men and only shot women (Langman, 2015). Finally, shooters frequently expressed fascination with the military, an institution entrenched in violence and praised by society at large.

Enactment of Hegemonic Masculinity

Approximately half (32, 52.2%) of the shooters reviewed demonstrated a documented history of rigid enactment of Western, White, heterosexual, cisgender (henceforth referred to as *colonizer*) cultural norms and expectations of men (e.g., dominance, preoccupations with sex, rejection of femininity). Consistent with the social–ecological model of violence (CDC, n.d.; Heise, 1998), a core component of hegemonic masculinity is its reinforcement, and punishment if violated, by others, including through societal

policies and practices. For example, at the writing of this article, there are 14 bills across several states to restrict/eliminate drag performances, which directly punish the violation of hegemonic masculinity through the use of “dress, makeup and mannerisms associated with a gender other than the one assigned to them at birth” (Helmore, 2023). The most prevalent ways this showed up in the shooters’ histories are codified below.

Dominance. All of the shooters within this category (32, 52.2%) had documented histories of adherence to the colonizer cultural expectation that men should be in charge and hold power, particularly in relation to women. This was the most prevalent code of this category among school shooters. A frequent demonstration of this was engagement in violence in reaction to a rejection from women in their life (e.g., love interest, teacher). Additionally, several shooters within this category referenced their superiority to others, frequently comparing themselves to “God.” For example, one of the Columbine High School shooters wrote, “I feel like God and I wish I was, having everyone being OFFICIALLY lower than me” (Langman, 2015, p. 23). The UCSB shooter frequently wrote about his superiority to “all humanity,” seeing normative expectations (e.g., working) as “beneath” him and himself as “destined for greatness” (Langman, n.d., pp. 2–4). Violent sexual fantasies are an intersection between dominance and sex and were noted in 10 (16.9%) shooters’ histories. For example, the Heath High School shooter had violent sexual material on his computer, including a story called “Raping of a Dead Corpse” (Langman, 2009, p. 78).

Preoccupation With Sex. Thirteen (22%) shooters had documented histories of the enactment of the colonizer cultural expectation that men have a higher motivation for sex, are owed sex from women, and/or should dictate others’ sexual behavior. For example, the St. Pius X High School shooter was described as being obsessed with sex and pornography (Langman, 2015). Following his shooting, indexed pages of nearly one thousand pornographic images were found. Additionally, the UCSB shooter viewed himself as a victim because women were unwilling to have sex with him and argued, “Women should not have the right to choose who to mate and breed with. This decision should be made for them by rational men of intelligence” (Shortridge, 2014).

Hostility Toward Femininity. Twenty-nine (49.2%) shooters had documented histories of enacting the colonizer cultural expectation that men cannot be feminine, that women are inherently less than men, and that women are responsible for life’s hardships. For example, the Jokela High School shooter referred to women as “cheating whores, lying sluts and manipulative bitches” (Langman, 2015, p. 49). Additionally, the Appalachian School of Law shooter refused to sit next to women in classes and threatened several female students and staff members. Prior to the shooting, several women reported being afraid of the shooter, with one female administrator refusing to meet with him without others present (Langman, 2015).

Threatened Masculinity

All shooters, with the exception of one who experienced severe psychosis, had a documented history of experiencing their masculinity as threatened, consistent with the constructs of masculine gender role discrepancy strain and precarious manhood and most frequently both. This was also the case for shooters who perpetrated VAW.

Masculine Gender Role Discrepancy Strain. Almost every reviewed school shooter (51, 86.4%) was coded as experiencing

masculine gender role discrepancy strain (Klein, 2005, 2006; Pleck, 1981). Masculine gender role discrepancy strain was defined as documented experiences of distress (e.g., anger, stress, resentment) that occur when one fails to live up to internalized colonizer masculine ideals (e.g., strong, dominant, highly sexual). One example of this is one of the Columbine High School shooters. This individual had several bodily deformities, failing to live up to masculine ideals of strength and dominance and resulting in anger and hatred for his own body. Additionally, many shooters experienced a rejection, as mentioned above, and, more specifically, a rejection by a love interest shortly before the shooting (25, 42.5%). This may have triggered masculine gender role discrepancy strain, as hegemonic masculinity asserts that men should get what they want, including women. Several shooters reported feeling resentment as a result of rejection, with some even feeling victimized (e.g., the UCSB shooter).

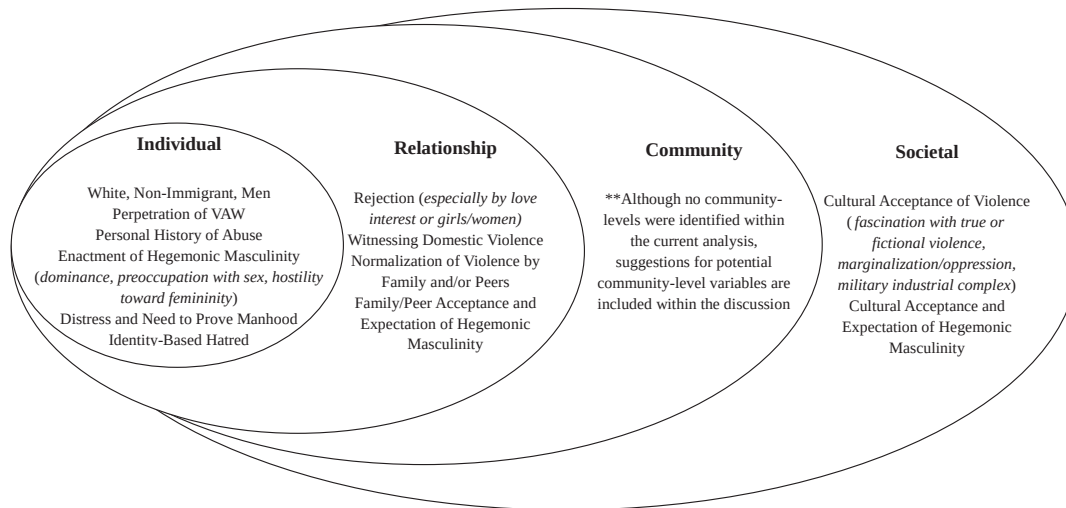
Precarious Manhood. Again, an overwhelming majority of school shooters reviewed (49, 83.1%) were coded as demonstrating precarious manhood (Vandello et al., 2008). Precarious manhood was defined as documented engagement in actions (e.g., violence) to prove one’s manhood following a perceived threat to one’s masculinity (e.g., rejection). The Lindhurst High School shooter was described as having a “fascination with ultramasculine activities,” which was likely in response to his childhood where his grandfather dressed him in feminine clothing and potentially sexually abused him (Langman, 2015, p. 58). Masculine gender role discrepancy strain and precarious manhood were often experienced together within the current sample. For example, the Columbine shooter discussed above experienced masculine gender role discrepancy strain as a result of his bodily deformities, which may have led to his utilization of violence to demonstrate his power and dominance and prove his manhood, consistent with precarious manhood.

Discussion

This study adds to the burgeoning literature highlighting the relationship between VAW and mass murder (Issa, 2019; Klein, 2005; Marganski, 2019). Particularly, the results extend our understanding of this relationship to school shootings, utilizing the social–ecological framework to guide our understanding. A substantial prevalence of VAW perpetration was identified among the profiled school shooters, with almost 70% of the profiled shooters perpetrating VAW either before or during their perpetration of a school shooting. Furthermore, 41% of the shooters profiled perpetrated VAW *prior* to the shooting, highlighting VAW as a potential target for prevention of school shootings. While the remaining 29% had no evidenced reports of VAW prior to their shootings, these individuals often exhibited other social–ecological features of VAW (i.e., normalization of violence and the enactment of and failure to meet expectations of hegemonic masculinity). Regarding demographics, White men who were not immigrants to the country they committed the shooting in (a narrative counter to the public perception that “terrorism” is committed by immigrants, e.g., De Ming Fan, 2007; Mancosu & Pereira, 2021) were most commonly represented in the profiles. These results are further detailed and placed within the social–ecological theoretical framework below (see Figure 2).

As mentioned, the social–ecological framework of violence (CDC, n.d.; Heise, 1998) expands our understanding of violence beyond a merely individual focus to include relationship, community, and societal factors that predict violence perpetration and victimization.

Figure 2
Social–Ecological Model of VAW and School Shootings



Note. VAW = violence against women. The italics signify examples of the construct listed prior.
 ** signifies a note to the reader.

Study results highlight several consistent factors that cut across the social–ecological levels, most notably hegemonic masculinity. Hegemonic masculinity includes the colonizer belief that men should be powerful and dominant, characteristics that are significantly more achievable by those who possess privileged identities (e.g., White, nonimmigrant, cisgender men), which contextualizes the disproportionate percentage of shooters with privileged identities. Additional attributes of hegemonic masculinity include a normalization of violence, especially if said violence is viewed as a means to achieve or prove one's power and dominance, the belief that women are inferior to men and thus are deserving of a subordinate position in society, and the preoccupation with and sense of entitlement to sex (Connell, 1987; Levant et al., 2010), all of which were frequently observed within shooters' histories and are correlates of VAW.

Furthermore, in line with recent research on masculinity and gun violence (Borgogna et al., 2022; Levant, 2022; O'Dea et al., 2022), almost all profiled shooters had a documented history of threatened masculinity. Consistent with masculine gender role discrepancy strain (Pleck, 1981) and precarious manhood (Vandello et al., 2008), when men are unable to meet the expectations of hegemonic masculinity, they may experience intense stress and respond to this stress in ways consistent with hegemonic masculinity, such as through the use of violence, to prove their manhood. In turn, when men have relational (e.g., family normalization of violence), community (e.g., school tolerance of violence), and societal experiences (e.g., cultural acceptance of violence) that reinforce and even expect such violence from men, it makes sense that boys/men would continue to engage in and escalate violence as a means of demonstrating their masculinity. Furthermore, the continuum of VAW highlights the interconnection between less visible and more accepted forms of violence (e.g., sexual harassment) and more extreme and public forms of violence (e.g., school shootings; Klein, 2006; Leidig, 1992). Thus, boys/men may escalate their displays of violence in order to prove their masculinity, to demand what they feel owed, or to seek revenge for being

"victimized" by others, particularly girls/women. "Victimization" is placed in quotes here as although almost half of shooters had a history of actual victimization (e.g., abuse, homophobic harassment), several of the shooters labeled normative experiences as "victimization," such as when teachers set limits with them or when girls refused their romantic and/or sexual requests. Therefore, many school shooters appeared to perceive boundaries or not getting what they wanted as forms of "victimization," a phenomenon emblematic of hegemonic masculinity and the belief that men, especially those with privileged identities, are superior and therefore "owed" whatever they want.

One such example is the case of the Pearl High School shooter. This individual shot his former girlfriend, her best friend, and his mother, wounding seven others. He experienced "chronic taunting" at school (Langman, 2015, p. 52) but did not target his bullies in the attack. Instead, he targeted his ex-girlfriend on the 1-year anniversary of their breakup. Afterward, he claimed, "I just wanted revenge on Christina" (Popyk, 1998). Thus, his girlfriend's rejection of him may have been more of a threat to his masculinity than the bullying, consistent with the idea of seeking revenge to prove his masculinity.

Limitations and Future Directions

The current findings should be considered in the context of several limitations. Our data are limited in its timeline and representativeness as the analyzed events occurred before 2019 and only included shooters that Langman had enough information on to build profiles. However, we believe the trends indicated in this study apply to current unexplored (and sadly, future) shootings. In addition, the data were descriptive in nature and therefore, no causal relationships can be established. As such, it is possible that other confounding variables better explain the relationship between VAW and school shootings. For example, perhaps elements of violence normalization or threatened masculinity fully explain both VAW and school shootings. Regardless, the overlap between these two variables is

notable, as they imply that efforts to reduce VAW may help to create communities less likely to be impacted by school shootings. Second, content was coded utilizing Langman's existing records on the topic. Langman's research, while extensive and fairly comprehensive, was not collected with the aim of identifying acts and social-ecological features of VAW. Thus, it is possible that connections were missed. Furthermore, many claims about school shooters remain unsubstantiated, leaving the researchers to decide how to code content.

As VAW exists on a continuum, the more frequent and often less acknowledged forms of VAW may have been unknowingly excluded. For example, acts such as engaging in catcalling or making rape jokes might have not been notable to the people in the perpetrators' life. Although these examples were not identified in the present study, more recent mass shooting events have reflected these overlooked behaviors (e.g., the Parkland School shooter, the Dayton shooter; Murphy et al., 2019; Robinson, 2018). This limitation reflects how the normalization of certain forms of VAW often creates a barrier to labeling such behavior as needing attention (Klein, 2006).

Finally, while our research found that girls/women were often targeted, no information regarding race, nationality, gender identity (e.g., trans, nonbinary), sexuality, or other elements of identity were collected. These areas are important for future research, as rates of gender-based violence are often higher against people of color and gender and sexual minorities (e.g., Black et al., 2011; James et al., 2016). These data highlight the importance of examining relationships between additional-isms and marginalized students' victimization in school shootings, especially as many shooters were interested in, enamored by, or even obsessed with Hitler, Nazis, and White supremacist groups (Langman, 2015).

Implications

Implications of this research can be applied at each level of the social-ecological model (CDC, n.d.; Heise, 1998). Targeting normalized violence and the enactment and expectation of hegemonic masculinity at the individual, relationship, community, and societal levels are important steps to decrease violence (see Figure 2 for specific areas to target). The societal level requires a cultural shift away from the acceptance of violence, including VAW, and expectations of hegemonic masculinity. Societal change might require public service announcements and widely spread education around the impact of the enactment and expectation of hegemonic masculinity and policy change to reflect an intolerance of all violence, including currently accepted forms of VAW (e.g., media guidelines for reporting VAW and school shootings including avoiding sensationalism and victim blaming).

While this study's findings did not directly focus on the community level, the authors see the benefit of targeting normalized violence and the enactment and expectation of hegemonic masculinity at this level. Within the lens of school shootings, the community level might be understood as the school system or the surrounding community in which schools are located. Future research should focus specifically on community-level variables including the impact of school climate and school-level policies (e.g., creation of cooperative classrooms, Aronson, 2000, comprehensive sexuality education, trauma-informed practices, and accountability structures) on violence in schools.

Since social-ecological levels are interrelated, addressing the enactment and expectation of hegemonic masculinity and normalization of violence at societal and community levels will likely result in changes at the relational and individual levels. Particularly, as

society encourages compassion and flexibility of gender roles and discourages violence, peers and family would be less likely to model and encourage hegemonic masculinity and VAW, which in turn would result in less internalization of these values and the need to prove one's manhood through the use of violence. In schools, multiple levels of intervention (individual, relational, and community) can be supported through multitiered systems of support.

In this framework, the level of support students receive in any given area is dependent on which of three tiers they fall into. Tier 1 includes all students and focuses broadly on fostering positive relationships among students and staff, basic intervention, and core instruction (PBIS Rewards, n.d.; Rosen, n.d.). Tier 2 includes a smaller group of students that need additional attention or support. Finally, Tier 3 represents a subset of students who need specific support and often who are not responding to larger interventions (PBIS Rewards, n.d.; Rosen, n.d.).

Within this framework, students who represent the risk factors for school shootings examined in this study: White, male, nonimmigrant students who endorse rigid adherence to and failure to meet colonizer expectations of hegemonic masculinity (i.e., dominance, preoccupation with sex, and hostility toward femininity), exposure to/normalization of violence, and/or have perpetrated VAW should be included in Tier 2 or Tier 3 if initial larger interventions are not effective. In Tier 3, schools can work with these students to create individualized plans, while collaborating with additional specialists. Furthermore, some school shooters had friends who expressed interest in topics such as Nazis, previous school shooters, domination, and other oppressive ideologies. In these cases, group intervention can be provided to challenge and shift these perspectives. These interventions may be particularly critical as several shooters spoke about their plans with peers prior to the shooting, offering a potential avenue for prevention. Finally, Tier 1 schoolwide intervention might include general shifting of norms related to cultural acceptance of violence, including VAW, and cultural expectations of hegemonic masculinity. Techniques such as bystander intervention training and consciousness raising might be used schoolwide to gain a sense of how cultural norms can serve to perpetuate or mitigate violent acts. Discussions of the value of gender expansiveness and the reality of multiple masculinities may also prove fruitful. Furthermore, training school personnel to recognize high frequency, normalized acts of violence, including VAW, might help to mitigate the escalation of these events. School personnel should take these acts seriously, believe girls/women and students with additional oppressed identities when they disclose victimization, and aim to create environments that prioritize these students' safety. Within the current review, several girls/women had reported concern regarding a shooter's behavior prior to the shootings. It is possible that if these concerns were taken more seriously, the shootings may have been prevented.

Finally, school policy and intervention should be taken in the context of larger societal-level changes. All shooters in this study had access to guns, and while additional factors such as VAW were related to their violence, perpetrators may have been stopped or at least less lethal without access to guns.

Conclusion

The findings in the present study provide empirical support for the relationship between VAW and school shootings. Grounded in the social-ecological model (Heise, 1998), it is posited that school shooters enact both VAW and school shootings as escalated

expressions of hegemonic masculinity particularly when they perceive their masculinity as being threatened and witness the normalization of violence. School personnel, surrounding communities, and policy-makers can work at the individual, relational, community, and societal levels to prevent school shootings through reduction of expectations of hegemonic masculinity and acceptance of violence across the continuum.

References

- Aronson, E. (2000). *Nobody left to hate: Teaching compassion after Columbine*. Holt & Company.
- Baughner, A. R., & Gazmararian, J. A. (2015). Masculine gender role stress and violence: A literature review and future directions. *Aggression and Violent Behavior*, 24, 107–112. <https://doi.org/10.1016/j.avb.2015.04.002>
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). *The national intimate partner and sexual violence survey (NISVS): 2010 summary report*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. https://www.cdc.gov/ViolencePrevention/pdf/NISVS_Report2010-a.pdf
- Borgogna, N. C., McDermott, R. C., & Brasil, K. M. (2022). The precarious masculinity of firearm ownership. *Psychology of Men & Masculinity*, 23(2), 173–182. <https://doi.org/10.1037/men0000386>
- Bushman, B. J., Coyne, S. M., Anderson, C. A., Björkvist, K., Dodge, K., Dubow, E. F., Farrington, D. P., Gentile, D., Huesmann, L. R., Lansford, J. E., Novaco, R., Ostrov, J. M., Underwood, M., Warburton, W., & Ybarra, M. (2018). *Risk factors for youth violence*. Youth Violence Commission. <https://static1.squarespace.com/static/57530523f850829d1dc031/t/5ad202726d2a73331c4449c1/1523712626745/isra-youth-violence-statement-2018.pdf>
- Centers for Disease Control and Prevention. (n.d.). *The social-ecological model: A framework for prevention*. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>
- Connell, R. W. (1987). *Gender and power*. Allen & Unwin.
- De Ming Fan, M. (2007). *The immigration-terrorism illusory correlation and heuristic mistake* (Vol. 10). University of Washington School of Law. <https://digitalcommons.law.uw.edu/faculty-articles/122/>
- Dragowski, E. A., & Scharón-del Rio, M. R. (2014). The importance of challenging hegemonic masculinity in preventing school violence. *School Psychology Forum*, 8(1), 10–27.
- Eisler, R. M., Skidmore, J. R., & Ward, C. H. (1988). Masculine gender-role stress: Predictor of anger, anxiety, and health-risk behaviors. *Journal of Personality Assessment*, 52(1), 133–141. https://doi.org/10.1207/s15327752jpa5201_12
- Fleming, P. J., Gruskin, S., Rojo, F., & Dworkin, S. L. (2015). Men's violence against women and men are inter-related: Recommendations for simultaneous intervention. *Social Science & Medicine*, 146, 249–256. <https://doi.org/10.1016/j.socscimed.2015.10.021>
- Gun Violence Archive. (n.d.). *Standard reports*. <https://www.gunviolencearchive.org/school-shootings>
- Heise, L. L. (1998). Violence against women: An integrated, ecological framework. *Violence Against Women*, 4(3), 262–290. <https://doi.org/10.1177/1077801298004003002>
- Helmores, E. (2023). Republican legislators introduce new laws to crack down on drag shows. *The Guardian*. <https://www.theguardian.com/world/2023/jan/21/anti-drag-show-laws-bans-republican-states>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Issa, Y. (2019). “A profoundly masculine act”: Mass shootings, violence against women, and the amendment that could forge a path forward. *California Law Review*, 107(2), 673–706. <https://doi.org/10.15779/Z382V2C98F>
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. transgender survey*. National Center for Transgender Equality. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>
- Katz, J., & Earp, J. (2013). *Tough guise 2: Violence, manhood and American culture*. Media Education Foundation.
- Kellner, D. (2013). School shooting, crisis of masculinity, and the reconstruction of education: Some critical perspectives. In B. Bockler, T. Seeger, W. Heitmeyer, & P. Sitzer (Eds.), *School shootings: International research, case studies, and concepts for prevention* (pp. 497–518). Springer.
- Klein, J. (2005). Teaching her a lesson: Media misses boys' rage relating to girls in school shootings. *Crime, Media, Culture*, 1(1), 90–97. <https://doi.org/10.1177/1741659005050245>
- Klein, J. (2006). An invisible problem: Everyday violence against girls in schools. *Theoretical Criminology*, 10(2), 147–177. <https://doi.org/10.1177/1362480606063136>
- Langman, P. (n.d.). *School shooters .info: Resources on school shootings, perpetrators, and prevention*. <https://schoolshooters.info/>
- Langman, P. (2009). *Why kids kill: Inside the minds of school shooters*. St. Martin's Publishing.
- Langman, P. (2015). *School shooters: Understanding high school, college, and adult perpetrators*. Rowman & Littlefield.
- Langman, P. (2016). *Expanding the sample: Five school shooters*. https://schoolshooters.info/sites/default/files/expanding_the_sample_1.5.pdf
- Langman, P. (2017). A bio-psycho-social model of school shooters. *The Journal of Campus Behavioral Intervention*, 5, 27–34. https://www.researchgate.net/profile/Jonathan-Silk-2/publication/321181410_Reducing_Care_Using_Design_Thinking_to_Restructure_the_Care_Team/links/5a139d75aca27217b5a3016a/Reducing-Care-Using-Design-Thinking-to-Restructure-the-Care-Team.pdf#page=31
- Leidig, M. W. (1992). The continuum of violence against women: Psychological and physical consequences. *Journal of American College Health*, 40(4), 149–155. <https://doi.org/10.1080/07448481.1992.9936276>
- Levant, R. F. (2022). Extending the gender role strain paradigm to account for U.S. males' gun violence. *Psychology of Men & Masculinity*, 23(2), 151–159. <https://doi.org/10.1037/men0000385>
- Levant, R. F., Rankin, T. J., Williams, C. M., Hasan, N. T., & Smalley, K. B. (2010). Evaluation of the factor structures and construct validity of scores on the Male Role Norms Inventory-Revised (MRNI-R). *Psychology of Men & Masculinity*, 11(1), 25–37. <https://doi.org/10.1037/a0017637>
- Madfis, E. (2017). In search of meaning: Are school rampage shootings random and senseless violence? *The Journal of Psychology*, 151(1), 21–35. <https://doi.org/10.1080/00223980.2016.1196161>
- Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the conformity to masculine norms inventory. *Psychology of Men & Masculinity*, 4(1), 3–25. <https://doi.org/10.1037/1524-9220.4.1.3>
- Mancosu, M., & Pereira, M. F. (2021). Terrorist attacks, stereotyping, and attitudes toward immigrants: The case of the Manchester Bombing. *Social Science Quarterly*, 102(1), 420–432. <https://doi.org/10.1111/ssqu.12907>
- Marganski, A. J. (2019). Making a murderer: The importance of gender and violence against women in mass murder events. *Sociology Compass*, 13(9), Article e12730. <https://doi.org/10.1111/soc4.12730>
- Messerschmidt, J. W. (2019). The salience of “hegemonic masculinity”. *Men and Masculinities*, 22(1), 85–91. <https://doi.org/10.1177/1097184X18805555>
- Murphy, P. P., Toropin, K., Griffin, D., Bronstein, S., & Levenson, E. (2019, August 7). Dayton shooter had an obsession with violence and mass shootings, police say. *CNN*. <https://www.cnn.com/2019/08/05/us/connor-betts-dayton-shooting-profile/index.html>
- Newman, K. (2004). *Rampage: The social roots of school shootings*. Basic Books.
- Novotney, A. (2018). What happens to the survivors. *American Psychological Association Monitor on Psychology*, 49(8), 36.

- O'Dea, C. J., Jardin, E., & Saucier, D. A. (2022). The masculinity-based model of Aggressive Retaliation in Society (MARS). *Psychology of Men & Masculinity*, 23(2), 160–172. <https://doi.org/10.1037/men0000391>
- Oudekerk, B. A., Musu, L., Zhang, A., Wang, K., & Zhang, J. (2019). *Indicators of school crime and safety: 2018*. Bureau of Justice Statistics. <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6526>
- PBIS Rewards. (n.d.). *What is MTSS?* <https://www.pbisrewards.com/blog/what-is-mtss/>
- Pease, B. (2021). Gendering violence: Theorising the links between men, masculinities and violence. In M. Husson, S. Karkulehto, T. Saresma, A. Laitila, J. Eilola, & H. Siltala (Eds.), *Violence, gender and affect* (pp. 71–90). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-56930-3_4
- Pleck, J. H. (1981). *The myth of masculinity*. MIT Press.
- Plummer, M., & Young, L. E. (2010). Grounded theory and feminist inquiry: Revitalizing links to the past. *Western Journal of Nursing Research*, 32(3), 305–321. <https://doi.org/10.1177/0193945909351298>
- Popyk, L. (1998, November 9). "I knew it wouldn't be right". *Cincinnati Post*.
- Robinson, I. (2018). I tried to befriend Nikolas Cruz. He still killed my friends. *The New York Times*. <https://www.nytimes.com/2018/03/27/opinion/nikolas-cruz-shooting-florida.html>
- Rosen, P. (n.d.). *What is MTSS?* Understood. <https://www.understood.org/articles/en/mtss-what-you-need-to-know>
- Schmuhl, M., & Capellan, J. A. (2020). Gendered massacres: Examining the effects of cultural and structural gender inequality on the incidence of mass public shootings. *Violence and Victims*, 35(6), 885–905. <https://doi.org/10.1891/VV-D-18-00184>
- Shorridge, L. (2014, May 27). Summary of Elliot Rodger's manifesto—Part 6. *News 24*. <https://www.news24.com/life/archive/summary-of-elliott-rodgers-manifesto-part-6-20140527-2>
- Silva, J. R., Capellan, J. A., Schmuhl, M. A., & Mills, C. E. (2021). Gender-based mass shootings: An examination of attacks motivated by grievances against women. *Violence Against Women*, 27(12–13), 2163–2186. <https://doi.org/10.1177/1077801220981154>
- Smith, R. M., Parrott, D. J., Swartout, K. M., & Tharp, A. T. (2015). Deconstructing hegemonic masculinity: The roles of antifemininity, subordination to women, and sexual dominance in men's perpetration of sexual aggression. *Psychology of Men & Masculinity*, 16(2), 160–169. <https://doi.org/10.1037/a0035956>
- United Nations. (1993). *Declaration on the elimination of violence against women*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-elimination-violence-against-women>
- United States Secret Service and Department of Education. (2004). *The final report and findings of the safe school initiative: Implications for the prevention of school attacks in the United States*. <https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf>
- Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious manhood. *Journal of Personality and Social Psychology*, 95(6), 1325–1339. <https://doi.org/10.1037/a0012453>
- Vito, C., Admire, A., & Hughes, E. (2018). Masculinity, aggrieved entitlement, and violence: Considering the Isla Vista mass shooting. *International Journal for Masculinity Studies*, 13(2), 86–102. <https://doi.org/10.1080/18902138.2017.1390658>

Received August 15, 2022

Revision received June 3, 2023

Accepted June 5, 2023 ■