

5-2024

Exploring the Intersection of Masculinity, Mental Health, and Mass Shootings

Kaitlyn Campbell
University of Arkansas, Fayetteville

Follow this and additional works at: <https://scholarworks.uark.edu/etd>



Part of the [Criminology Commons](#)

[Click here to let us know how this document benefits you.](#)

Citation

Campbell, K. (2024). Exploring the Intersection of Masculinity, Mental Health, and Mass Shootings. *Graduate Theses and Dissertations* Retrieved from <https://scholarworks.uark.edu/etd/5349>

This Thesis is brought to you for free and open access by the Graduate School and International Education at ScholarWorks@UARK. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact uarepos@uark.edu.

Exploring the Intersection of Masculinity, Mental Health, and Mass Shootings

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Sociology with a Concentration in Criminology

by

Kaitlyn Campbell
University of Arkansas
Bachelor of Arts in Criminology and Sociology, 2022

May 2024
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

Kayla Allison, Ph.D.
Thesis Director

Jeff Gruenewald, Ph.D.
Committee Member

Michael Niño, Ph.D.
Committee Member

Abstract

Few studies have explored how intersecting challenges to masculinity and mental health can precipitate mass shootings. This study examines how responses to strained masculinity and mental health disorders combine across varying situational and social contexts to explain why and how offenders commit mass shootings. Data come from the U.S. Extremist Crime Database, Bias Homicide Database, and other open-source data on mass shootings. Drawing from Allison and Klein's (2021) concept of "strained masculinity", this study utilizes a qualitative narrative approach to uncover themes of strained masculinity and mental health issues among perpetrators of mass shootings. Different storylines emerge capturing ways some men use mass violence to address challenges in their pursuit of hegemonic masculinity. The "strained masculinity" framework is extended by examining how challenges to mental health and masculinity can intersect in ways that influence offenders' decisions to commit mass shootings. Findings contribute to the literature on the causes and consequences of mass shootings as well as the utility of the "strained masculinity" concept for understanding why these violent crimes occur. Future research should continue to consider how challenges to mental health and masculinities intersect in ways that can inform mass violence preventative initiatives.

Acknowledgements

As a master's student at the University of Arkansas, I have received invaluable guidance from many people to whom I owe a significant debt of gratitude. This manuscript would not have been possible if it weren't for their words of encouragement, feedback, and reassurance.

First and foremost, I want to thank Dr. Jeff Gruenewald for giving me access to data as well as his unwavering support throughout graduate school. Navigating academia as a first-generation college student often made me feel like an outlier and he was always there to remind me that my ideas were important. Without his wit, teaching, and mentorship, I would not be the scholar and person that I am today. I also want to thank Dr. Michael Niño for his dedication and support throughout this journey. He is among one of the kindest people that I have ever met and his dedication and commitment to students is something that I admire. I owe my deepest thanks to my mentor and thesis advisor, Dr. Kayla Allison. Thank you for providing me with the space to think, write, and believe in myself. Throughout my undergraduate and graduate career, she has been one of my biggest supporters and I would not be the person and scholar I am today and will be without her presence in my life. Her guidance and mentorship over the past three years has provided me with the support and dedication that I aspire to emulate as I continue my academic career. I will forever be grateful for meeting you amidst a pandemic and the ways in which you have shaped the trajectory of my academic career.

I also want to thank Becca Simpson and Brynn Schuetter for their support on this project. Brynn—thank you for challenging me, being one of my closest friends, and making graduate school more bearable. If there was an award for work ethic and dependability, you would win it. The world needs more people like you, and I can't wait to continue cheering you on in all that

you do. Finally, I want to thank my friends, family, and the rest of the faculty in the department Criminology and Sociology for their continued support.

Table of Contents

Introduction.....	1
Theoretical Framework.....	3
Merton’s Strain	
Agnew’s GST	
Strained Masculinity	
Literature Review.....	6
Mass Shootings	
Mental Health	
Masculinities, and Mental Health, and Mass Shootings	
Current Study.....	10
Data and Methods.....	12
Findings.....	18
Discussion.....	31
Conclusion.....	35
References.....	37

INTRODUCTION

Few phenomena exemplify the prominent threat of gun violence in the United States more than high-profile mass shootings. Indeed, mass shootings occur in the United States more than in any other country, with incidents becoming more prevalent and deadlier in the last decade (Lankford & Silver, 2020; Lankford, 2016). Notably, sixteen of the 20 most deadly shootings in modern history have occurred in this century, with eight of them in the last seven years (Peterson & Densley, 2019). Although rare events, mass shootings are difficult to predict, posing a significant challenge to law enforcement and mass violence prevention strategies. Nonetheless, understanding the psychological, sociological, and situational factors along offenders' pathways toward mass shootings is important for developing empirically based strategies to counter mass violence.

Though still in its infancy, research on this type of extreme violence has seen substantial growth over the past several years. Prior comparative research has examined the characteristics, methods, and motivations of mass shooters, and to a much lesser degree the underlying psychological, situational, and sociological factors associated with mass shootings. It is known that perpetrators are typically White, often have mental health problems, and experience feelings of loneliness, perceived victimizations, grievances, unhealthy desires for fame or attention, and personal crises (Capellan et al., 2019; Duwe, 2016; Peterson & Densley, 2019; Schildkraut et al., 2018). While these factors may be common among mass shooters, the single most patterned fact about mass shooters is that they are nearly always men. Specifically, men commit roughly 98 percent of mass shootings (Peterson & Densley, 2019). While several scholars have acknowledged this commonality, less scholarly attention has focused on why it is overwhelmingly American men committing these acts of violence.

Following the aftermath of mass shootings, much of the public and scholarly attention has concentrated on the role of mental health. However, existing research paints a complex and multifaceted picture of whether it is relevant to understanding mass shootings. For example, estimates of the role of mental health varies across the literature, with studies acknowledging that 30% (Duwe, 2007; Taylor, 2018) to approximately 67% of perpetrators exhibited signs of mental illness before the attacks (Duwe, 2020; Peterson & Densley, 2019; Silver, Simons, & Craun, 2018). While these studies have helped contribute to our understanding of mass violence, they fail to provide a complete picture given that women also experience mental health disorders but do not engage in this type of violence to the degree that men do.

What has been largely absent in public discourse and scholarly research on the topic of mass shootings then are discussions of how masculinity and gender identity may intersect with mental health in ways that culminate in mass violence. A few notable studies have demonstrated how perceived challenges to masculinity can lead to mass shootings (Morgan et al., 2022, Silva et al., 2023), while others have found links between mental health challenges and mass shootings (Lankford, 2016; Lankford 2020). What is missing, then, is an examination of how masculinity and mental health may converge in a way that results in mass violence. This is an important oversight in prior research as it is very feasible that the effects of “strained masculinity” and mental health challenges do not operate as isolated conditions, but instead as factors simultaneously influencing decisions to commit mass shootings within particular micro- and macro-level settings. Drawing from Allison and Klein’s concept of strained masculinity, as well as Morgan et al (2022), the current study contributes both theoretically and methodologically to the study of mass shootings, homicide studies, and masculinities.

The purpose of this study is to examine the intersection of masculinity and mental health as precipitates to mass shootings. By investigating strained masculinity and offender's mental health, this study aims to shed light on the social, situational, and psychological factors that influence decisions to commit these extreme forms of homicide. In the following sections, I will first describe the theoretical frameworks guiding the current study, and second, discuss prior research utilizing strained masculinity to study types of extreme violence. Third, I will review the relevant literature establishing what we know about mass shootings and discuss the gaps in research. Finally, I will discuss the current study along with the data and analytical approach used.

THEORETICAL FRAMEWORK

MERTON'S STRAIN

Merton's strain theory (1938) sought to understand why certain cultures, groups, and individuals were more prone to crime and/or engage in criminal behavior. In doing so, strain theory acknowledges that individual behavior is guided by what society deems as normal. Merton (1938) argues that all individuals in the United States are encouraged to achieve the American dream, viewed as the cultural goal of monetary success or middle-class status. One of his central tenets emphasizes that pressures from social institutions, and expectations associated with the American Dream may lead individuals to use illegitimate channels, such as criminal involvement, when legitimate channels are blocked. Thus, Merton argues these pressures should explain why certain individuals, mainly the working class, engage in crime. A major critique of classical strain theory is that it only explains crime among lower-class individuals and disadvantaged populations (Broidy, 2001; Kornhauser, 1978). Furthermore, Merton's theory fails to provide explanations for why crime occurs in the middle and upper classes.

AGNEW'S GST

Agnew's (1992) general strain theory (GST) is a revision and extension of Merton's (1938) classical strain theory, which focused exclusively on the failure to achieve aspirations. Agnew's GST broadens the scope of strain theory and posits that there are three major sources of strain, including the failure to achieve positively valued goals, the loss of positive stimuli (e.g., parents separating/divorcing, friends/romantic partners), and the introduction of negative stimuli (e.g., victimization, relationships with family). Central to the GST framework is that what links strain to crime are the negative emotions that individuals experience in response to strain. Emotions, such as anger and frustration, are especially important because they create pressure for corrective action, lower inhibitions, and create a desire for retaliation. Furthermore, strains that are most conducive to criminal offending are those that are perceived as unjust, high in magnitude, associated with low social control, and those that create pressure to engage in crime as a coping mechanism (Agnew, 2001).

Broidy and Agnew (1997) proposed that the broad scope of GST's main tenets could explain the gender gap in offending as well as female-perpetrated crime by focusing on the types of strain, emotional reactions, and conditioning factors that affect men and women. While many researchers have sought to test these assertions, some have found minimal significant gender differences in the strain-crime process (Baron, 2007; Leban & Gibson, 2020). Importantly however, many scholars suggest that the experience of strain, both emotionally and behaviorally, is gendered (Broidy, 2001; Hay, 2003; Jang, 2007; Piquero & Sealock, 2004).

Prior research has demonstrated how gender identity and masculinity intersect to influence how men situationally respond to strain. For instance, Peralta and Tuttle (2013) found that male perpetrators of intimate partner violence (IPV) experienced frustrations from the

inability to achieve certain financial societal standards of masculinity. Moreover, perpetrators acknowledged that IPV provided the means to regain power, status, and control over their partners. Indeed, violence is often viewed as a way for some men to address their problems, meaning boys and men are socialized to believe that physical aggression and violence provide an avenue for responding to any perceived loss or challenge to masculinity.

STRAINED MASCULINITY

Just as strain and masculinity have been linked to violence, both can also explain extreme acts of violence, such as bias-motivated violence, mass shootings, and terrorism (Bridges & Tober, 2018; Farr, 2018; Kennedy-Kollar & Charles, 2013; Madfis, 2014; Marganski, 2019; Morgan et al., 2022; Vito, Admire & Hughes, 2018). Focusing on male perpetrators of school shootings, Kalish and Kimmel (2010) demonstrated how the culture of hegemonic masculinity, defined as the configuration of practices that embodies the most ideal form of masculinity in the United States leads to a sense of aggrieved entitlement conducive to violence. Specifically, they found that nearly all shooters were bullied, picked on, and threatened because they were unable to meet standards of masculinity.

To better understand fatal attacks against homeless persons, Allison and Klein (2021) combine strain and masculinity theories to explain the situational contexts in which anti-homeless homicides unfold. Recognizing hegemonic masculinity as a positively valued goal that men are socialized to actively pursue, the authors found that when legitimate avenues for pursuing hegemonic masculinity are blocked or challenged, some men may resort to bias-motivated violence as a form of corrective action. Allison and Klein (2021) identified three categories that describe the ways in which men use violence against persons experiencing homelessness to situationally address challenges or strains in their pursuit of hegemonic

masculinity. Specifically, offenders engaged in acts of violence as a response to challenges to masculinity as well as through alternative avenues for pursuing hegemonic masculinity, including violence as a sport, and through reclaiming control of space.

Research has also found the strained masculinity framework to be useful in explaining the situational and social factors contributing to mass shootings. To understand the gender gap in mass shootings, Morgan et al. (2022) used “strained masculinity” to explain the dynamic background and situational factors preceding these attacks. Their findings demonstrated support for all three categories related to strained masculinity, observing that many of the mass shooting incidents demonstrated multiple themes of masculinities. And although the authors address the gender gap in offending, the relevance of strained masculinity as it interacts with mental health issues remains an important consideration in understanding mass violence. If women also experience mental health challenges but do not commit mass shootings, then it is important to consider the ways in which men express mental health challenges as they relate to masculinity in the context of mass shootings.

LITERATURE REVIEW

MASS SHOOTINGS

It is important to acknowledge that there has been much ambiguity regarding what constitutes a mass shooting. To date, no legal definition of the term “mass shooting” has been developed. Moreover, there is a lack of consensus over how many victims qualify as a mass incident. While some scholars argue that incidents must include at least four victims (see Krouse and Richardson, 2015; Peterson & Densley, 2019; Schildkraut & Elsass, 2016), others have included fewer than three victims (Follman, Arensen, & Pan, 2013). For example, the most comprehensive database on mass shootings uses the definition “...a multiple homicide incident

in which four or more victims are murdered with firearms—not including the offender (s)—within one event, and at least some of the murders occurred in a public location or locations in close geographical proximity, and the murders are not attributable to any other underlying criminal activity or commonplace circumstance” (Krouse & Richardson, 2015, p. 10).

Existing research has used the concept of “mass public shooting” or “public mass shooting” to distinguish mass shootings that occur in public spaces from those that occur in domestic settings. Most scholars agree on three definitional elements of a public mass shooting: the incident must occur in a public place or populated location, involve at least some random and/or symbolic victims, and should occur within 24 hours (see Peterson & Densley, 2019; Schildkraut Elsass, 2016). Unlike other forms of mass shootings (e.g., gang and familicide), public mass shootings are random and usually involve considerable planning. Likewise, the public location of these incidents presents significant challenges for both prevention strategies and responses from law enforcement.

Regardless of the terminology used, shooters who commit these attacks have been found to come from various educational, socioeconomic, and family backgrounds, with different education levels, geographical location, and financial status. Despite this, a discernible pattern remains: the vast majority of mass shooters are male. Prior research demonstrates that public mass shootings occur in various contexts, including workplaces, religious institutions, government institutions, K-12 schools, colleges/universities, and commercial or other public areas (Lankford, 2018). Underlying causes of mass shootings primarily include increasing social isolation, frustration, anger, and rage against schools, workplaces, social groups, and communities. For example, Newman & Fox (2009) observed that most mass shooters believe that they have been underappreciated, disrespected, or mistreated. What these feelings are often

associated with include conflicts at work or school, such as negative interactions and relationships with teachers, fellow students, bosses, and coworkers, including being suspended, expelled, demoted, or fired. Taken together, it is possible that these perceived injustices/victimizations interact with mental health issues whereby mass shooters' lack or loss of coping mechanisms may contribute to the carrying out of a mass shooting.

MENTAL HEALTH

Prior studies suggest that approximately 67% of mass shooters exhibit signs of mental health challenges before their attacks (Duwe, 2020; National Threat Assessment Center, 2019; Peterson and Densley, 2019; Silver et al., 2018; Fein et al., 2004), despite the fact that less than half of mass shooters are officially diagnosed with a mental illness (National Threat Assessment Center, 2019; Peterson and Densley, 2019; Silver, Simons, & Craun, 2018; Yelderman et al., 2019). Several challenges are relevant when assessing the role of mental illness in mass shootings. For example, defining mental illness is a challenge for researchers as the diagnostic categories change over time, hundreds of mental illnesses exist, and approximately half of the population in the U.S. will meet the criteria for at least one in the course of their lifetime (Schaefer et al., 2017).

Recent researchers acknowledge that there is reason to believe that the prevalence of mental health challenges among mass shooters has likely been underestimated. Just as stereotypes that portray mass shooters as clinically insane are harmful and stigmatizing to those with a mental illness, these concerns may also contribute to underestimations out of caution about broader public health consequences. Likewise, the prevalence of mental health issues among mass shooters may be underestimated because of inaccurate stereotypes about mental illness and poor mental health literacy. Misconceptions of mental illness are often attributed to

the equivalent of being insane or delusional, which may contribute to false assumptions that mass shooters could not have a mental health problem (Lankford & Silva, 2018).

While existing research indicates the relevance of mental health in mass shootings, what is not emphasized is the fact that women also experience mental health disorders and do not commit mass shootings. Even in studies that address mental health in the context of mass shootings, discussions of how this is an overwhelming male-perpetrated phenomenon are absent. In other words, despite research indicating that the majority of mass shooting perpetrators have a history of mental health problems, current research has yet to examine why and how it is almost always men with unaddressed mental health problems that commit these acts of violence. Understanding the prevalence and role of mental health in mass violence means understanding that men and women express, react, and respond to symptoms of mental illness differently. Indeed, just as violence may be used by some men to “do gender”, those same practices may be used in how men express and respond to mental health challenges.

MASCULINITIES, MENTAL HEALTH, AND MASS SHOOTINGS

Understanding the social processes and situational factors contributing to mass shootings requires a further exploration into masculinity, mental health, and social contexts in which perpetrators are embedded. As mentioned previously, discussions of how masculinity and gender identity more broadly intersect with the mental health of mass shooters have been conspicuously absent in public discourse and scholarly research on the topic of mass shootings. By continuing to view the threat of mass shootings as solely a mental health problem, we risk overlooking gendered, situational, and social processes that may be important to effectively detect, prevent, and mitigate the threat of mass shootings.

Importantly, an emerging body of scholars highlights the importance of men’s mental health and masculinity in the context of mass shootings. For example, Rice (2023) stated, “Teaching psychiatric trainees to recognize that boys with such aggressive tendencies can be worked with therapeutically is crucial. Trainees can be helped to understand that male aggression has meaning as self-protection and a way to validate a sense of masculinity.” Furthermore, from a policy perspective, the fact that some offenders interacted with the health care system suggests that for many at-risk individuals, intervention may be possible if professionals are educated and supported to respond to those situations.

Understanding the various psychological, sociological, and situational factors that contribute to the decisions to commit these extreme acts of violence is important for creating and implementing violence intervention strategies. Connell's (1995) theory of multiple masculinities has provided health researchers a promising way of moving beyond seeing men’s health problems as the inevitable consequence of a socialized male role and as something influenced by the dynamics of cultural practices and resources men use to configure gender (Courtenay, 2003).

THE CURRENT STUDY

Despite recent advances in the extant mass violence literature, past studies have yet to examine how masculinity and mental health may intersect in a way that results in mass violence. By examining the differing circumstances in which the effects of strained masculinity and mental health may interact in a way that results in mass violence, the current study contributes to the body of knowledge in several ways. Rice (2023) emphasized the need for future research to consider the unique gendered processes to understand the functional role of mental health in mass shootings. While prior studies have focused their attention on mental health and mass shootings, discussions of how mental health challenges and masculinity may shape decisions to

commit mass shootings remain conspicuously absent in empirical research on mass shootings. Furthermore, Lankford (2024) voiced that greater knowledge of the functional role of mental health in mass shootings is timely and needed.

Focusing on how mental health problems and strained masculinity may interact, converge, or exacerbate, in ways that shape or contribute to engaging in mass violence can provide a more nuanced understanding of this type of violence. Drawing from Allison and Klein's (2021) concept of "strained masculinity", this study further explores the intersection of simultaneously experienced challenges to masculinity and mental health issues as precipitates to mass shootings. Specifically, I ask:

RQ: How does "strained masculinity" intersect with mental health in explaining why and how individuals commit mass shootings?"

Like Allison and Klein (2021), this study considers hegemonic masculinity to be a positively valued goal that men continuously aim to achieve. In their pursuit for hegemonic masculinity, men may experience challenges, or strains, corresponding with what Agnew (1992) explains as a failure to achieve a positively valued goal. This study will rely on the three themes previously identified by Allison and Klein (2021) to illustrate the significance of strained masculinity and mental health as it relates to mass shootings. These themes reflect varying situational circumstances in which strains or challenges to a man's pursuit of hegemonic masculinity are addressed.

Mass shooting cases are coded into the following thematic categories, including (a) *responses to challenges to masculinity*, fatal attacks of mass violence that occur as a response to the situational strain resulting from challenges to masculinity; (b) *pursuit of hegemonic*

masculinity through “sport”, fatal acts of violence that occur for “sport”, or the thrill of it and is tied to an offender’s obsession with violence and/or recreational weapon use; and (c) *pursuit of hegemonic masculinity through controlling space*, fatal acts of mass violence that occur as a response to men’s desire to regain power and control over physical and social space.

The following sections discuss the data sources, variable measurement, and methodological approach. First, I describe the open-source databases that are used to identify mass shooting cases. Next, I discuss the inclusion criteria for mental illness and strained masculinity themes guiding the current study. Third and finally, the analytical approach is discussed.

DATA AND METHODS

This study uses data gathered from the Extremist Crime Database (ECDB), the Bias Homicide Database (BHDB), and Schildkraut and Elsass’s mass shooting database. Specifically, this study focuses on mass shootings occurring between 1990 and 2020. The current study defines a mass shooting as an incident of targeted gun violence carried out by one or more shooters at one or more public or populated locations within a 24-hour period. The incident must not be associated with profit-driven criminal activity (e.g., robbery, gang violence), state-sponsored violence (e.g., war), or instances of familicide. An incident must involve four or more casualties (e.g., deaths + injuries), not including the perpetrator’s death. This study will include non-ideologically motivated mass shootings and ideologically motivated mass shootings that adhere to extreme far-right, far-left, and radical-Islamic belief systems. While much of what we know about mass shootings is based on analyses of a singular database, this study draws from three separate databases thus providing a more complete and comprehensive representation of

public mass shootings. In total, the combined dataset consists of 175 mass shootings occurring between 1990 and 2020.

The ECDB is an open-source relational database that collects information on incident-, offender-, and victim-level characteristics of extremist crimes (Freilich et al., 2014). To be included in the ECDB, an incident must be an illegal violent incident, or an illegal financial scheme committed in the United States in which at least one of the perpetrators subscribes to an extremist belief system. In total, 35 mass shooting incidents were identified from the ECDB involving at least one perpetrator who subscribes to a far-right, far-left, or radical-Islamic extremist ideology and committed the mass shooting to further that belief system.

The BHDB is an open-source database that collects information on felonious killings committed by identified offenders in which evidence exists that victims were targeted in part or wholly based on one or more real or perceived status or identity characteristics in the United States (Gruenewald & Allison, 2018). The BHDB collects information on individuals who are not affiliated with an organized hate group or domestic extremist affiliation as well as those that are. Identifying bias homicides is done through systematic searches of publicly available materials, including official criminal justice sources (e.g., police reports, FBI reports, and court documents), scholarly reports, advocacy and watchdog reports, and news media sources. In total, 6 mass shootings incidents were identified from the BHDB involving at least one perpetrator that targeted people because of who they are perceived to be or what they represented.

Finally, Schildkraut and Elsass's database contains 227 non-ideological mass shooting incidents occurring in the United States between 1990 and 2020. To be included in the database, a mass shooting must be an act of targeted violence carried out by one or two shooters, at one or more public locations in a 24-hour period, with at least four casualties including at least 1 death.

Victims are either chosen at random or for a specific symbolic value. The incident must not be motivated by gang violence, targeted militant, or terroristic activity. To be included in Schildkraut and Elsass's dataset, incidents were identified through media accounts, existing databases, and web searches and then cross-referenced through at least three sources to ensure that it aligns with the definition. In the current study, spree shootings without 4 victims at one location were not included. After removing duplicated cases found in BHDB and ECDB, there were 138 non-ideological mass shootings collected.

Consistent with prior mass shooting research, this study used open-source data collection procedures to identify and collect information on each incident and perpetrator involved (Blair et al., 2013; Capellan, 2015; Kelly, 2012; Lankford, 2013; Peterson and Densley, 2019). Open-source data includes information that is open to the public and accessed via the Internet. Once the final list of mass shootings was compiled, multiple online search engines were used to gather detailed information on the offenders and incidents (see Appendix B). Open-source materials, such as news media articles, legal documents, blogs, videos, police reports, and government documents were used to create case files on each incident. Official reports and news media articles include the names of offenders, their motives, criminal background, preparatory behaviors, and the outcome of the shooting.

An offender's mental health condition will be determined by reviewing open-source documents for characterizations by family members, close friends, and investigators regarding the perpetrator's mental health status. Given that many mass shooters have never been formally evaluated and intentionally avoid doctors or hide their mental health problems due to shame or stigma, there is a significant discrepancy between the number of offenders diagnosed with a mental illness and the proportion who demonstrate signs or symptoms (Lankford, 2013, 2016).

Therefore, relying solely on a formal medical diagnosis ignores the full extent of the mental health problems in this population (Capellan, 2019). For that reason, mass shooters who had evidence of having displayed symptoms of mental illness, been formally diagnosed with mental illness, or received mental health treatment were coded as “evidence of mental illness”. The remainder were coded as “no evidence of mental illness,” indicating that there was not enough information to know if the offender was formally diagnosed or displayed signs of mental illness.

In addition to investigating mass shooters’ mental health status, this study also examines the applicability of Allison and Klein’s (2021) categories related to strained masculinity. The three primary themes that describe the ways in which men may use violence to situationally address challenges or strains in their pursuit of hegemonic masculinity are defined below and include (1) responses to challenges to masculinity, (2) the pursuit of hegemonic masculinity through “sport”, and (3) the pursuit of hegemonic masculinity through controlling space.

1. *Response to challenges to masculinity*: perpetrators engage in mass violence as a result of challenges to masculinity. For example, challenges to masculinity can include experiences such as rejection by women, financial strain, and/or loss of employment. In response to these challenges, perpetrators will engage in acts of mass violence in hopes of restoring their pursuit of, and commitment to, hegemonic masculinity.
2. *Pursuit of hegemonic masculinity through “sport”*: perpetrators engage in mass violence for the thrill of it—tied to an obsession with violence and guns (e.g., researching prior mass shootings, collecting guns). These offenders engage in mass violence as an illegitimate avenue for pursuing masculinity when legitimate avenues are blocked.
3. *Pursuit of hegemonic masculinity through controlling space*: perpetrators engage in mass violence to regain power and control over physical and social space. These offenders

often target social groups, whom they might blame for their positions in life, as a form of corrective action in their pursuit of hegemonic masculinity. For ideological violence, the location of the incidents can also be symbolic of the offender's cause or belief system.

ANALYTICAL APPROACH

Each strained masculinity category is binary coded: challenges to masculinity (0=no, 1=yes), pursuit of hegemonic masculinity through "sport" (0=no, 1=yes), and pursuit of hegemonic masculinity through controlling space (0=no, 1=yes). Whereas prior research examining the concept of strained masculinity and mass shootings identified cases that demonstrated multiple themes of strained masculinity, this study also includes a binary variable for multiple strained masculinity themes (0=no, 1=yes).

Several incident- and offender-level variables are coded to further contextualize the nature of mass shootings. At the incident level, measures for incident location type (0=Commercial Business, 1=Government Building, 2=Office Building, 3=Religious Institution, 4=School, 5=Transportation/Street/Park, 6=Outside of Building, 7=Other), mass shooting type (0=Rampage, 1=School, 2=Workplace), firearm type (0=Assault Rifle, 1=Handgun, 2=Rifle, 3=Shotgun), victim and offender relationship (0=Strangers, 1=Brief Acquaintances, 2=Friends, 3=Family/Intimate Partner), and incident outcome (0=Offender arrested, 1=Offender suicide, 2=Offender suicide by cop) are included. At the offender level, measures for offender demographics including, race (0=White, 1=Black or African American, 2=Asian, 3=Middle Eastern or North African, 4=Other), ethnicity (0=Not Hispanic or Latino, 1=Hispanic or Latino), age (interval data), and gender (0=Male, 1=Female, 2=Transgender) are captured. Other background characteristics of the offender are also included, for instance, education (0=less than a high school diploma, 1=high school diploma, 2=some college/professional program, 3=college

graduate and beyond), occupation (0=Unemployed, 1=Employed , 2=Student), military experience (0=No military experience, 1=Previous military experience, 2=Current military experience), relationship status (0=Single,1=Separated, 2=Divorced 3=Steady Significant Other, 4=Widowed), evidence of substance abuse issues (0=no, 1=yes), and evidence of mental health issues (0=no, 1=yes). Importantly, because the unit of analysis is the incident, if an incident had more than one offender, only the primary offender was included.

To qualitatively examine mass shooting incidents, the current study utilizes a homicide narrative approach (Kubrin & Weitzer, 2003) to conduct in-depth analyses of all 175 mass shootings to contextualize how these fatal attacks unfold. A homicide narrative is constructed for the 175 mass shootings, which provides detailed information regarding three different sequential stages of the criminal event: (a) *precursor*, which accounts for the background and situational characteristics leading up to the mass shooting, (b) the *transaction*, which focuses on the interactions between mass shooters and the victims during the attack, and (c) the *aftermath*, which represents the offenders' actions after the crime occurs (Sacco & Kennedy, 2002). The homicide narratives demonstrate how each mass shooting unfolds within and across particular micro- (situational, psychological) and macro- (social, political, gender, and cultural) level contexts.

Homicide narratives are constructed using thematic analysis (Braun & Clarke, 2006) and focus on previously identified themes of strained masculinity. Drawing from Allison and Klein's (2021) and Morgan et al., (2022) analytical strategy, mass shootings were coded into the following thematic categories, including: (a) *responses to challenges to masculinity* (n=155), acts of mass violence that occur as a response to challenges to masculinity; (b) *pursuit of hegemonic masculinity through "sport"* (n=67), acts of mass violence committed for "sport", or for the thrill

of it, as a result of strain stemming from a lack of legitimate channels for demonstrating masculinity; and (c) *pursuit of hegemonic masculinity through controlling space* (n=51), which refer to acts of mass violence perpetrated by offenders as a way to regain power and control over physical and social space.

The following section details the findings from the current study. First, a description of the sample, including incident and offender characteristics is described. Then, example narratives from each strained masculinity category are provided. The emphasis of this discussion will focus on how these strained masculinity categories intersect with mental health to better understand why and how it is almost always men who commit mass shootings.

FINDINGS

As demonstrated in Table 1, the majority of mass shooters were male (97.8), exemplifying the extreme gender gap in mass shootings. This finding is consistent with prior

	N	%/mean	Range
Age	175	34	13-70
Gender (Male)	175	97.8	
Race			
White	107	61.1	
Asian	8	4.6	
Black	34	19.4	
Middle Eastern or North African	11	6.3	
Other	5	2.9	
Ethnicity			
Hispanic or Latino	16	9.1	
Education			
College graduate and beyond	28	16.0	
Some college/professional program	29	16.6	
High school diploma	29	16.6	
Less than high school diploma	27	15.4	
Occupation			
Student	25	14.3	

Unemployed	52	29.7
Employed	77	44.0
Military		
Current military experience	6	3.4
Previous military experience	35	20.0
No military experience	72	41.1
Relationship		
Single	51	29.1
Separated	11	6.3
Divorced	17	9.7
Steady significant other	20	11.4
Married	24	13.7
Widowed	1	0.6
Substance abuse		
History of substance abuse	47	26.9
Mental illness		
Evidence of mental health issues	152	86.9

work demonstrating that roughly 98% of mass shootings are perpetrated by men (Peterson & Densley, 2019; see also Lankford & Cowan, 2020, Peterson & Densley, 2024). As shown in Table 1, mass shooters are typically White (61%) and on average around 34 years old although they range in age from 13-70. A little less than half (44%) of offenders were employed, while around 20% had prior military experience. Around 30% of perpetrators were single, however, around 24% were either married or in a steady relationship. While approximately 27% of mass shooters had a history of substance abuse, around 87% had evidence of a mental health issue.

Table 2. Incident Descriptive Statistics (N=175)

	N	%
Shooting type		
Rampage	93	53.1
School	28	16.0
Workplace	54	30.9
Location type		
Commercial Business	62	35.4
Government Building	16	9.1
Office Building	27	15.4
Religious Institution	12	6.9

School	29	16.6
Transportation/Street/Park	12	6.9
Outside of Business	7	4.0
Other	10	5.7
Firearm type		
Assault Rifle	38	21.7
Handgun	106	60.6
Rifle	13	7.4
Shotgun	14	8.0
Incident Outcome		
Offender arrested	74	42.3
Offender suicide	70	40.0
Offender suicide by cop	30	17.1
Victim Offender Relationship		
Strangers	87	49.7
Brief Acquaintances	67	37.7
Friend	12	6.9
Family/Intimate Partner	10	5.7

Table 2 provides incident characteristics related to mass shootings. Most incidents occurred as part of a rampage shooting (53%), while other incidents occurred as part of a workplace shooting (31%) or school shooting (16%). Mass shootings were most likely to take place inside commercial businesses (35%), schools (17%), and office buildings (15%) and predominately targeted strangers (50%) or brief acquaintances (38%) with rifles (21.7%) and handguns (61%). A majority of mass shooting incidents ended in suicide (57%), either self-inflicted (40%) or by a cop (17%).

Consistent with prior research, findings indicate the majority of mass shooters were men with evidence of mental health issues. Mass shootings were most likely to be carried out at commercial locations (e.g., restaurant, bar, retail), office buildings (e.g., workplace), and schools (e.g., K-12 school, college/university). The majority of perpetrators targeted strangers or brief acquaintances and carried out their attack using a handgun. Most incidents ended in suicide, either self-inflicted or by law enforcement. While employment and relationship status varied

among mass shooters, most perpetrators were employed and single at the time of the attack. In short, these findings highlight the complexity of mass shootings, revealing no singular profile across perpetrators.

STRAINED MASCULINITY THEMES

To better understand how mass shootings unfold and the degree to which strained masculinity and mental health challenges interact, or converge together, to explain this type of extreme violence, event narratives from each of the three distinct categories of strained masculinity are provided below. Each theme, as it intersects with mental health, is discussed in relation to both prior literature and the strained masculinity framework.

RESPONSES TO CHALLENGES TO MASCULINITY (n=155; 88.6%)

Many mass shootings involve perpetrators who, as a result of a “strain” or challenge to their masculinity, responded with mass violence as a means to reaffirm their pursuit of and adherence to hegemonic masculinity (n=155). Importantly, a vast majority of these cases involved offenders with evidence of a mental health issue (85.8%).

A year before the shooting, the 41-year-old perpetrator was fired from his job after 17 years with the company. He was unable to find employment and expressed feelings to family members that his former coworkers were 'out to get him'. Experiencing financial troubles, his wife and children left him four days prior to the incident. On the day of the shooting, the perpetrator returned to his former workplace asking for his job back but was rejected. He left a suicide note stating that he was depressed and wanted to “punish” those responsible for losing his job. After retrieving his guns, the perpetrator returned to where workers were gathered to prepare for their daily assignments and opened fire. In total, the perpetrator murdered 5 people and injured 1 before turning the gun on himself. (Case 21)

In this case, the perpetrator’s experience of being fired from his job after 17 years, coupled with the subsequent inability to secure new employment and the loss of his family, likely contributed to feelings of emasculation and powerlessness. Returning to his former workplace to demand his

job back, being rejected, and then resorting to mass violence could then be seen as an attempt to restore his strained masculinity. Prior research demonstrates that for many American men, the workplace and work-related strain is a major cause of trigger of stress and depression or exacerbated conditions (Oliffe et al., 2010). Moreover, the suicide note left by the perpetrator, wherein he stated he was depressed and wanted to “punish” those responsible for his employment failures, aligns with other incidents whereby offenders targeted coworkers and/or supervisors.

In other words, strain resulting from the workplace fueled many offenders’ desires to target specific individuals that directly challenged or strained their masculinity. Feeling undervalued in their workplace, pressure to perform and succeed, unhealthy relationships with coworkers, increased job responsibilities, and working overtime were common among these offenders. Notably, over half of the mass shootings that occurred at former or current workplaces involved offenders with evidence of a mental health issue (e.g., depression) who resorted to mass violence in response to challenges to their masculinity (n=31).

Importantly, the prevalence of alcohol and drug abuse was seen as a precipitating circumstance in many attacks.

While in the U.S. Air Force, the 27-year-old perpetrator was ordered several mental health interventions in the year prior to the shooting over concerns about his alcohol abuse and suicidal thoughts. A week before the incident, the perpetrator’s fiancé called off their wedding due to his emotional state. On the day of the shooting, he was confronted by his fiancé about his suicidal thoughts and quitting his medication. Following the confrontation, the perpetrator returned to his house and started drinking. After arming himself with two handguns, he rode his bike to a nearby bridge and opened fire. In total, the perpetrator murdered 3 people and wounded 1 other before turning the gun on himself. (Case #)

Indeed, most offenders with a history of drug or alcohol abuse demonstrated signs of mental health challenges and/or suicidal ideation. Research on men's mental health and depression shows that alcohol and drugs are often used by men as a means to hide or cover up their mental health challenges and depressed feelings (Brown et al., 2012; Cleary, 2012; Rochlen et al., 2010), while other studies have shown that college-aged men with depression viewed binge drinking and substance use as a manly strategy that reduced their odds of being marginalized by their peers (Olliffe et al., 2013). Using alcohol and drugs is considered a coping mechanism and resource to suppress or numb emotional distress. Furthermore, it is well established in the literature that destructive behaviors, such as substance misuse, violence, and suicide, are ways of 'doing' depression that display particular masculinities (Addis, 2008; Branney & White, 2009; Courtenay, 2000; Emslie et al., 2006; Johnson et al., 2012; Mahalik & Rochlen, 2006; Olliffe et al., 2017; Scholz et al., 2017; Seidler et al., 2016; Smith et al., 2018; Whittle et al., 2015).

Interestingly, several of the perpetrators who displayed evidence of a mental health issue specifically targeted mental health personnel, psychiatrists who make mental health diagnoses, and institutions that referred them to mental health treatment.

The 20-year-old perpetrator exhibited concerning behaviors and experienced significant strain leading up to the shooting. In basic training, he was ordered to have a mental health evaluation following complaints about his unhealthy living patterns. Feeling like his roommate was attempting to ruin his career, the perpetrator's distrust of others and perception of being targeted intensified following the diagnosis, contributing to his isolation and paranoia. His work performance deteriorated, and he started missing appointments and showing signs of suicidal ideation according to his squadron commander. A month before the shooting, the perpetrator was discharged from the military. He left a poem stating he "felt less of a man" following his discharge from the military and that "all of my emotions couldn't subside; I went back to those who took away my career". A week before the shooting, his ex-girlfriend refused to get back together with him. The day of the shooting, the perpetrator returned to the air base hospital and walked directly to his former psychiatrist's office and opened fire. In total,

he murdered 4 people and wounded 22 others before a military police officer ended his rampage. (Case 35)

In this case, the perpetrator had a desire for revenge against the military and psychiatrists, specifically the mental health professionals whose observation of him ultimately led to his discharge from the military. In an attempt to restore his “strained masculinity”, the offender targeted those he perceived to have stripped him of his military career. He left a poem stating that he “felt less of a man” and “all my emotions I couldn’t subside, I went back to those who took away my career” (Brown, 2017, p. 165). Despite being discharged for his deteriorating mental health; the perpetrator never received a definitive diagnosis and was discharged without a recommended treatment plan. The perpetrator’s unwillingness to engage in conversation with the psychiatrist reflects that of other cases as well as a broader trend within the military culture (Spears and Hayes, 2022). Indeed, the military’s institutional embodiment of the “protector and defender” places an emphasis on physical strength and emotional resilience, creating a culture and environment where engaging in mental health treatment may be perceived by others as failure or weakness. Thus, expressing vulnerability by engaging in conversation with mental health clinicians is at odds with the masculinity standards that many men in the military are expected to adhere to.

PURSUIT OF HEGEMONIC MASCULINITY THROUGH SPORT (n=67; 38.1%)

These cases involve acts of fatal violence committed for “sport”, or for the thrill of it, and as a result of strain stemming from a lack of legitimate channels for achieving masculinity (n=67). Evidence of a mental health issue was prevalent in the majority of cases (92.5%).

In the months before the shooting, the 20-year-old perpetrator, who had a history of sexual abuse, had experienced a breakup with his girlfriend, lost his job, and been told by his family that he needed to move out on his own. He had written on a handwritten note that he had always been fascinated with “firearms, death, and killing” adding that, “the

mistakes of loneliness and failure have built up too high.” On the day of the shooting, he walked into his former high school armed with a 12-gauge shotgun and a .22 caliber rifle. Walking from classroom to classroom, the perpetrator opened fire indiscriminately at students and teachers. In total, he killed 4 people and wounded 11 others. He then went on to hold approximately 85 students hostage for eight and a half hours, eventually surrendering to the police. During interviews with investigators, the perpetrator stated that the school failed him, leaving him with a crappy job and nothing to live for. (Case 124)

In this case, the perpetrator was obsessed with guns and violence. In the months leading up to the shooting, he experienced multiple strains, including the loss of his job, a breakup with a girlfriend, and family plans for him to move out and live on his own. Every unemployment check he received would be spent on weapons or buying pellets for his guns. Moreover, he was molested during high school by a male teacher, which raised questions about his sexuality and contributed to his hatred for the school and desire to seek revenge. He spent hours in the shooting ranges near his house, suggesting that carrying and shooting a gun may have been a coping mechanism for his emotional distress and strained masculinity. Prior studies that focus on hegemonic masculinity and firearms found that carrying a firearm gave some males a sense of confidence against threats to their masculinity and a superior ability to confront a situation harshly if needed (Button & Worthen, 2017; Carlson, 2015; Cassino & Besen-Cassino, 2020; Levant, 2022; Ray et al., 2021; Stroud, 2012; Warner & Steidley, 2022).

Some offenders in this category also researched or were inspired by prior mass shooters:

Concern over the perpetrator’s behavior began in the year leading up to the shooting. A few months before the shooting, the perpetrator heard a song that mentioned the Columbine shooting and became infatuated. He enrolled at a new school, struggled to make friends, and became depressed. After a fight with a student, he brought a machete and hatchet to school. The perpetrator was expelled and had to be homeschooled. He struggled to complete schoolwork on time and spent most of his time on the Internet. A month before the shooting, he became friends with a group of individuals who connected over a shared interest in carrying out a school shooting, which offered him the connection he sought. He told investigators that his participation in the group was the first time people wanted to talk to him. On the day of the shooting, the perpetrator entered the

parking lot of his former elementary school armed with a .40 caliber semi-automatic handgun. Firing shots into the air, he repeatedly shouted that he hated his life. He walked towards the school playground and opened fire, murdering 1 student, and injuring 3 others. (Case 89)

In this case, the perpetrator spent an excessive amount of time researching, manufacturing, and practicing with firearms. Concerning behaviors became evident in the months prior to the shooting as this offender spent much of his time on the Internet reading about prior school shootings. Given the omnipresence of the Internet, the opportunity for individuals to engage with violent material has increased, resulting in the creation of social media platforms that reinforce and amplify the dissemination of information about prior mass shooters. Within this context, the perpetrator started researching mass shootings as an illegitimate “sport” when more legitimate channels to demonstrate his masculinity were blocked (Messerschmidt, 2000). In this case, the Internet influenced the perpetrator’s pathway to violence, demonstrating the importance of peer influence, social support, and a sense of belonging.

This perpetrator, along with many others, often identified with mass shooters, studied their methodologies and wanted to outdo their attacks. The internet provides a space for individuals to connect with others who share similar interests and experiences. And while these platforms can provide a sense of belonging and reduce feelings of loneliness, those same processes may also exploit those same vulnerabilities by offering a sense of identity, purpose, and validation. Evident in the narrative above is that this online community exacerbated the perpetrator’s feelings of isolation and loneliness by reinforcing and amplifying his desire to gain notoriety and attention (Lankford, 2016; Lankford & Madfis, 2018; Silva & Greene-Colozzi, 2019; Lankford, 2018). Given that mass shootings receive a tremendous amount of media attention, gaining notoriety and attention from major news media outlets may have served as a

sense of validation and illegitimate channel to restore his identity and status (Langman, 2015; Lankford, 2016; Levin & Madfis, 2009; Schildkraut & Elsass, 2016; Lankford & Madis, 2017).

PURSUIT OF HEGEMONIC MASCULINITY THROUGH CONTROLLING SPACE (n=51; 29.1%)

Many mass shooters engaged in violence in an attempt to regain power and control over physical and social space (n=51). These offenders often target certain social groups whom they might blame for their difficult positions in life, viewing this violence as a form of corrective action. Most of these cases involved an offender with evidence of a mental health issue (94.2%).

The 48-year-old perpetrator threatened Black coworkers, often using racial slurs and spoke of a coming “race war”. Two years prior to the shooting, he was suspended from work and sent to professional anger management and health counseling for two weeks. He was ordered to undergo a psychological evaluation a year before the shooting. On the day of the shooting, the perpetrator told his father he was angry that he was required to attend an ethics and sensitivity training course. Minutes after the course began, he stormed out of the office and told his supervisor he was taking matters into his own hands. Minutes later, he returned with a 12-gauge shotgun and opened fire. In total, he murdered 6 and injured 8 others before turning the gun on himself. After the shooting, information from family members revealed he was depressed, felt like everybody was against him, knew he had problems, and that supervisors had ignored him when he sought help. (Case 27)

Some offenders in this category also appeared to target people based on their social status.

The perpetrator had recently experienced an injury from a car accident that prevented him from re-enlisting in the military or finding any employment. Months prior to the shooting, officers responded to a call in which the perpetrator’s mother, who he lived with, told officers that his angry outbursts had been getting out of control. Officers conducted a mental health evaluation on the perpetrator but concluded that he did not pose a danger to himself. The perpetrator had recently dropped out of college after another college student talked down to him. He felt disrespected by fellow college students because of his military service and held a hatred towards them, characterizing them as “entitled, liberal civilians who had no understanding or comprehension of his war experiences and should be wiped off the map.” He specifically chose to target a bar on their "college night" when he knew more college students would be in attendance. On the day of the shooting, the perpetrator opened fire on students that were gathered for a college event. In total, 12 people were killed, 15 others were wounded before he committed suicide. Shortly thereafter, investigators revealed that he had extensively researched previous mass shootings and murder-suicide. (Case 70).

In the narrative above, multiple themes of strained masculinity were identified. The perpetrator was in a car accident and suffered an injury to his shoulder, preventing him from getting a job, working out, and re-enlisting in the military. As his frustrations grew, he began researching prior acts of mass violence and murder-suicide. Family members of the perpetrator expressed frustration that he would not seek help for his PTSD and chronic pain. While asking for and receiving help must be carefully negotiated by men in order to uphold their masculinity, the unique messages regarding masculinity in military culture suggest that a focus on the intersection between strained masculinity and mass shootings is warranted. Specifically, in the narrative above, the perpetrator was socialized into military culture, which emphasizes standards of hegemonic masculinity such as emotional stoicism and self-reliance (Jakupcak et al., 2006). Within this context, service men who deviate from the military's standards of masculinity or experience strain in their pursuit of hegemonic masculinity may find themselves at odds with the military's emphasis on emotional control, self-reliance, and denigration of help-seeking, all of which may have contributed to the perpetrator's reluctance to engage in treatment.

The military itself is a masculine institution and embedded in the military are cultural norms that encourage more stereotypical masculine behaviors while at the same time discouraging non-masculine behaviors, such as seeking treatment for mental health challenges. Moreover, many studies indicate that servicemen fear that their problems will spread throughout their units and chain of command, endanger their security clearance, and result in a possible separation from the military (Spears & Hayes, 2022). Although not within the scope of this study, research on the impacts of strained masculinity on military culture and violence is warranted. Furthermore, while only around 23% of mass shooters had some kind of military

experience, all of the offenders in the current study faced an array of strain and emotional distress that cannot be separated from the encumbering expectations society places on men.

Within this category of strained masculinity, some offenders were motivated by extremist beliefs and targeted a symbolic location.

The perpetrator created an account on a far-right social media website a few weeks before the shooting. His profile showed multiple posts expressing concern that White people were headed toward certain extinction and that Jewish people were to blame. On the day of the shooting, he posted that he couldn't sit by and watch his people get slaughtered and that he was going to take action. As members of the congregations were gathered for morning service, the perpetrator approached the synagogue armed with an assault rifle and three handguns and opened fire. When police arrived at the synagogue, the perpetrator opened fire and retreated further into the building. 30 minutes later, he surrendered after being shot by tactical teams. He told investigators after the shooting that Jews were committing genocide against his people. In total, the perpetrator murdered 11 and injured 6 others. (Case 150)

Central to many of these cases is the concept of “difference”. These perpetrators often perceived their status as White men as being threatened. Perry (2001) conceptualizes bias crime as a distinct form of violence, emphasizing the connection between situated action and the underlying structural dynamics shaping social relations. Because of the historical social stratification in the United States, nearly all social institutions—family, politics, economics, media, education—are structured hierarchically based on intersecting identities, such as gender, class, and race. (Perry, 2001). These differences often favor the dominant or hegemonic group, marginalizing others and leading to violence in response to perceived threats to their status.

MULTIPLE THEMES OF STRAINED MASCULINITY (n=82, 46.59%)

There was evidence of multiple strained masculinity themes in nearly half of the mass shootings. In other words, these cases illustrated more than one strained masculinity theme. Of these cases, 63 of them had two strained masculinity themes, whereas 19 cases had three strained

masculinity themes. Moreover, of the total 82 mass shootings with multiple themes, nearly all incidents included perpetrators that demonstrated evidence of a mental health issue (93.9%).

The perpetrator was unable to develop intimate relationships and experienced a lot of rejection by women. He also had a patterned obsession with violence, including an admiration for serial killers and rapists. For decades prior, he engaged in repeated instances of inappropriate and criminal behavior directed toward women and girls. Because of these behaviors, he lost multiple jobs, was banned from certain locations, and had multiple contacts with law enforcement. A week before the shooting, the perpetrator canceled his mental health counseling appointment. On the day of the shooting, he intended to target women by opening fire inside a yoga studio, ultimately killing 2 women, and injuring 4 others. He died from a self-inflicted gunshot wound before the police arrived. (Case 12).

The case in the narrative above involves an offender who was motivated by prejudicial beliefs about women and specifically sought out a business frequented mostly by women to engage in mass violence as a means of ridding the space of them. Within this context, the perpetrator demonstrated masculinity through controlling space in an attempt to restore his “strained masculinity”. Specifically, in the narrative above, the perpetrator’s inability to develop or maintain relationships with women, coupled with his perception of women’s societal power over men, contributed to his motivation to commit an act of mass violence against women. His patterned history of harassment and violent behaviors against women resulted in the loss of multiple jobs and court-ordered mental health treatment on at least 4 different occasions. A week before the shooting, the perpetrator made multiple calls to his psychiatrist and canceled his appointment for that week. It is important to note that while not all men who hold misogynistic views commit mass shootings, findings from this study demonstrate how deeply held beliefs and ideologies about social groups and social hierarchies based on “difference” should be at the forefront of concern for mass violence intervention in the United States.

NEGATIVE CASE ANALYSIS

Evidence of strained masculinity were absent in four of the mass shooting cases examined. While this may be a result of limited open-source reporting, further review of these cases is relevant. For example, every mass shooter in these outlier cases demonstrated evidence of a mental health issue before opening fire. With the exception of one case, these incidents were all labeled as workplace shootings, suggesting that workplace violence may significantly receive fewer news media articles (see Schildkraut et al., 2018). Most of these perpetrators were suffering from depression and refused to seek out mental health treatment according to family members. One of the perpetrators received a mental health diagnosis and refused to take medication offered to him. In two of the mass shooting incidents, the perpetrators died from self-inflicted gunshot wounds, while the other two perpetrators were found to be mentally incompetent during their trial.

While all mass shootings included perpetrators that either had evidence of a mental health issue or were observed to have strained masculinity themes present, there were several perpetrators that did not appear to have any underlying mental health concerns (n=23). Further review of these cases revealed several commonalities. The majority of these mass shootings included perpetrators who died by suicide (73.9%). Moreover, most of these perpetrators were non-ideologically motivated and experienced challenges to their masculinity (e.g., fired from their job, a recent breakup). Many of these cases were also workplace shootings and had less than 4 total fatalities. Taken together, further research focusing on the intersection of strained masculinity and mental health as it relates to suicide is needed.

DISCUSSION

The findings from the current study highlight the dynamic interplay between strained masculinity and mental health as they pertain to mass shootings. While the utility of the strained masculinity

framework is established in the context of extreme acts of violence (Allison and Klein, 2021; Morgan et al., 2022), the current study demonstrates the utility of a strained masculinity approach for explaining how and why mass shootings occur with careful consideration of mental health concerns. Descriptive statistics revealed that mass shootings are most often perpetrated by men with unaddressed mental health challenges. In other words, this type of violence is male-oriented and underpinned with observable evidence of mental health problems and criminogenic strain. These findings appear to align with prior research suggesting that one avenue for men to pursue hegemonic masculinity is through violence (Messerschmidt, 2012), within the context of men's expression of mental health disorders (Branney & White, 2008; Brownhill et al., 2005).

Using homicide narratives to detail the social, psychological, and gendered processes of mass shootings in the United States, this study identified patterns in how men commit mass shootings to situationally respond to challenges or strain in their pursuit of hegemonic masculinity. Specifically, men engaged in acts of extreme violence as a response to challenges to masculinity (88.6%) and to pursue hegemonic masculinity through illegitimate channels, including violence as a "sport" (38.1%) and violence used to reclaim control of public and social spaces (29.1%). The prevalence of mental health issues among these perpetrators underscores the complex interplay between mental health challenges and the need to restore their strained masculinity.

It appears that many mass shooters experienced workplace and relationship strain. Within this context, many mass shooters did not solely experience one source of strain, but, instead, experienced multiple forms of strain, including financial troubles, familial loss, and relationship troubles. The prevalence of being diagnosed with a mental health disorder or being recommended to seek out mental health treatment was significant, demonstrating that the ways in

which society and social institutions (e.g., workplace, military, government) approach men's mental health are critical. Moreover, the reluctance to seek help for mental health issues within the military and workplace illustrates the prevalence of 'the silent crisis' of men's mental health.

Importantly, the intersection of strained masculinity and mental health underscores the multifaceted nature of what motivates an individual to commit a mass shooting. Perpetrators who experience multiple strains may be more vulnerable to developing depression, anxiety, or even paranoia. Findings demonstrate that mental health disorders may further heighten feelings of strained masculinity and powerlessness, escalating the odds of extreme violence as a maladaptive coping mechanism. For example, many perpetrators experienced rejection or familial conflicts in the weeks and months leading up to the attack. Without legitimate channels to perform masculinity to others, feelings of betrayal and inadequacy may have contributed to their desire for revenge against those perceived as responsible for their emotional pain. Furthermore, perpetrators who feel excluded or rejected by their peers may harbor grievances against those they perceive as more successful or desirable.

Many mass shooters resorted to violence through "sport" as a way to restore their strained masculinity. Obsession with guns and prior mass shootings served as a coping mechanism for underlying challenges of mental health and perceived feelings of inadequacy. Namely, the influence of peer groups and online communities further reinforces these behaviors, creating a sense of belonging and validation for offenders experiencing strain or challenges to masculinity and mental health problems. School shooters represented the majority of cases in this strained masculinity theme. Given the omnipresence of the Internet, young males grappling with identity issues and social pressures may be particularly susceptible to adopting violent ideologies and engaging in acts of mass violence as a means of gaining notoriety and respect from their peers.

These perpetrators frequently engaged in preparatory and planning behaviors, such as visiting shooting ranges, researched prior mass shootings, and firearm acquisition in the weeks leading up to the attack.

Perpetrators, often young men, experienced multiple strains, including social rejection, academic failure, and recent breakup, leading to feelings of isolation and desire for revenge. The school environment, with its emphasis on gender norms and peer dynamics, becomes a place that many perpetrators harbored resentment towards. Thus, perpetrators targeted schools to restore their sense of masculinity, enacting revenge on those they perceived as responsible for their grievances. Furthermore, it is important to acknowledge that most of the pursuit of hegemonic masculinity through sport cases were perpetrators that displayed observable warning signs to friends and family members and expressed suicidal or homicidal ideation.

For many perpetrators, the ability to reclaim power and control over others using a firearm may have served as a coping mechanism for underlying feelings of inadequacy and social isolation. Within this context, using firearms symbolized a sense of control and empowerment, affording them the ability to feel superior, instill fear in others, and situationally restore their strained masculinity. In one of the cases, the perpetrator feared what his friends and girlfriend would think of him after receiving a mental health diagnosis, suggesting that the cultural and institutional characteristics of schools may be relevant for mass violence intervention strategies surrounding mental health. Moreover, many of these perpetrators had recently been discharged from the military for mental health issues, demonstrating that the loss of a legitimate channel to achieve masculinity in the military may contribute to decisions to commit mass shootings.

Furthermore, the pursuit of hegemonic masculinity through controlling space was prevalent in some mass shootings (29.1%), highlighting the intersection of race, gender, and social status in shaping decisions to commit mass shootings. These perpetrators often targeted marginalized groups whom they perceived as threats to their masculinity. The presence of extremist beliefs may have exacerbated these perceptions, fueling acts of violence driven by extremist ideologies. The prevalence of mental health challenges was significant among these perpetrators. Within this context, it may be that men experiencing mental health challenges may seek out extremist ideologies to justify their grievances and exacerbate their desire for revenge against those perceived as threats. In many cases, perpetrators targeted places of worship, military bases, airports, and schools. These perpetrators often exhibited signs of mental health disorders, such as depression, anxiety, and paranoia, which are known to exacerbate feelings of social isolation and perceived marginalization.

CONCLUSION

This study is not without its limitation. First, the open-source database relies on publicly available information, leaving room for bias and misinformation as well as missing information. This is an unfortunate and unavoidable limitation of utilizing open-source data. The database was created relying on publicly available information, leaving room for bias and misinformation given that the original source data was gathered for purposes different than the current study (Metzl et al., 2021). Second, the timeframe of the data (1990-2020) requires careful consideration of societal and cultural shifts over time. The evolving landscape of American culture and society over the past three decades has led to significant changes in attitudes, values, and norms related to violence, mental health, and guns. Understanding these contextual shifts is important and should be considered when interpreting this study's findings. Prior research has

acknowledged that the media tends to be more sympathetic toward White mass shooters, labeling them as mentally ill or a victim of society compared to Black mass shooters (Duxbury et al., 2018). This racialized lens can influence media coverage and public perception, shaping narratives around criminality instead of mental health issues. Future research should consider how strained masculinity in combination with other types of strains (e.g., racial discrimination) influences violent offending.

Mass shootings remain a consistent threat and concern in the United States. Explanations for the role of mental health challenges among mass shooters have been under-theorized and fail to consider the gendered nature of these acts of violence. While prior research has identified mental health challenges and masculinity as worthy of scholarly attention, this is the first study to consider the degree to which strains to masculinity and mental health issues may combine together to explain mass shootings. Findings illustrate that the majority of mass shooting were carried out by men that experienced various strains to their masculinity and mental health challenges before their attack. Effective prevention and intervention strategies must consider the underlying social, gendered, and situational factors that contribute to these extreme acts of violence. Future research should continue to focus on how mental health problems and strained masculinity may interact, converge, or exacerbate, in ways that shape or contribute to engaging in mass shootings. As such, the intersection of strained masculinity and mental health challenges among perpetrators underscores the need for going beyond traditional mental health care approaches and to consider the broader social and cultural norms underlying these acts of extreme violence.

References

- Agnew, R. (2002). Experienced, vicarious, and anticipated strain: An exploratory study on physical victimization and delinquency. *Justice Quarterly*, 19(4), 603-632.
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47-88.
- Allison, K., & Klein, B. R. (2021). Pursuing hegemonic masculinity through violence: An examination of anti-homeless bias homicides. *Journal of Interpersonal Violence*, 36(13-14), 6859-6882.
- Baron, S. W. (2007). Street youth, gender, financial strain, and crime: Exploring Broidy and Agnew's extension to general strain theory. *Deviant Behavior*, 28(3), 273-302.
- Bridges, T., & Tober, T. L. (2018). Mass shootings, masculinity, and gun violence as feminist issues.
- Broidy, L. M. (2001). A test of general strain theory. *Criminology*, 39(1), 9-36.
- Broidy, L., & Agnew, R. (1997). Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency*, 34(3), 275-306.
- Brownhill, S., Wilhelm, K., Barclay, L., & Schmied, V. (2005). 'Big build': hidden depression in men. *Australian & New Zealand Journal of Psychiatry*, 39(10), 921-931.
- Capellan, J. A., & Anisin, A. (2018). A distinction without a difference? Examining the causal pathways behind ideologically motivated mass public shootings. *Homicide Studies*, 22(3), 235-255.
- Connell, R. W. (2005). *Masculinities*. Polity. United States.
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Social Science & Medicine*, 50(10), 1385-1401.
- Duwe, G. (2020). Patterns and prevalence of lethal mass violence. *Criminology & Public Policy*, 19(1), 17-35.
- Duwe, G. (2016). The patterns and prevalence of mass public shootings in the United States, 1915–2013. *The Wiley handbook of the psychology of mass shootings*, 20-35.
- Duwe, G. (2004). The patterns and prevalence of mass murder in twentieth-century America. *Justice Quarterly*, 21(4), 729-761.
- Farr, K. (2018). Adolescent rampage school shootings: Responses to failing masculinity performances by already-troubled boys. *Gender Issues*, 35, 73-97.
- Follman, M., Arensen, G., & Pan, D. (2013). A guide to mass shootings in America. *Mother Jones*. <https://www.motherjones.com/politics/2012/07/mass-shootings-map/>

- Freilich, J. D., Chermak, S. M., Belli, R., Gruenewald, J., & Parkin, W. S. (2014). Introducing the United States extremist crime database (ECDB). *Terrorism and Political Violence*, 26(2), 372-384.
- Guerrero, A. P., Miao, T. A., & Brenner, A. M. (2023). The role of psychiatric education in addressing mass shootings and preventing violence: expanding our capacity for complexity. *Academic Psychiatry*, 47(5), 457-460.
- Hay, C. (2003). Family strain, gender, and delinquency. *Sociological Perspectives*, 46(1), 107-135.
- Kalish, R., & Kimmel, M. (2010). Suicide by mass murder: Masculinity, aggrieved entitlement, and rampage school shootings. *Health Sociology Review*, 19(4), 451-464.
- Kennedy-Kollar, D., & Charles, C. (2013). Hegemonic masculinity and mass murderers in the United States. *Southwest Journal of Criminal Justice*, 8(2).
- Kornhauser, R. (1978). *Social Sources of Delinquency*. Chicago: University of Chicago Press.
- Krouse, W. J., & Richardson, D. J. (2015). Mass murder with firearms: Incidents and victims, 1999-2013. <https://www.nmvvrc.org/media/ikmhvmmn/mass-murder-with-firearms-1999-2013.pdf>
- Lankford, A., & Cowan, R. G. (2020). Has the role of mental health problems in mass shootings been significantly underestimated? *Journal of Threat Assessment and Management*, 7(3-4), 135.
- Lankford, A., & Silver, J. (2020). Why have public mass shootings become more deadly? Assessing how perpetrators' motives and methods have changed over time. *Criminology & Public Policy*, 19(1), 37-60.
- Lankford, A. (2016). Fame-seeking rampage shooters: Initial findings and empirical predictions. *Aggression and Violent Behavior*, 27, 122-129.
- Lankford, A. (2015). Mass shooters in the USA, 1966–2010: Differences between attackers who live and die. *Justice Quarterly*, 32(2), 360-379.
- Leban, L., & Gibson, C. L. (2020). The role of gender in the relationship between adverse childhood experiences and delinquency and substance use in adolescence. *Journal of Criminal Justice*, 66, 101637.
- Madfis, E. (2014). Triple entitlement and homicidal anger: An exploration of the intersectional identities of American mass murderers. *Men and Masculinities*, 17(1), 67-86.
- Marganski, A. J. (2019). Making a murderer: The importance of gender and violence against women in mass murder events. *Sociology Compass*, 13(9), e12730.
- Meloy, J. R., Hempel, A. G., Gray, B. T., Mohandie, K., Shiva, A., & Richards, T. C. (2004). A comparative analysis of North American adolescent and adult mass murderers. *Behavioral Sciences & the Law*, 22(3), 291-309.

- Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.
- Morgan, S., Allison, K., & Klein, B. R. (2022). Strained masculinity and mass shootings: toward a theoretically integrated approach to assessing the gender gap in mass violence. *Homicide Studies*, 10887679221124848.
- Newman, K., & Fox, C. (2009). Repeat tragedy: Rampage shootings in American high school and college settings, 2002-2008. *American Behavioral Scientist*, 52(9), 1286-1308.
- Peralta, R. L., & Tuttle, L. A. (2013). Male perpetrators of heterosexual-partner-violence: The role of threats to masculinity. *The Journal of Men's Studies*, 21(3), 255-276.
- Peterson, J., & Densley, J. (2019). The Violence Project database of mass shootings in the United States.
- Peterson, J. K., Densley, J. A., Hauf, M., & Moldenhauer, J. (2024). Epidemiology of mass shootings in the United States. *Annual review of clinical psychology*, 20. <https://doi.org/10.1146/annurev-clinpsy-081122-010256>
- Piquero, N. L., & Sealock, M. D. (2004). Gender and general strain theory: A preliminary test of Broidy and Agnew's gender/GST hypotheses. *Justice quarterly*, 21(1), 125-158.
- Rice, T. (2023). Psychiatric Education Through The Men's Mental Health Perspective Can Address Mass Shootings and Prevent Violence. *Academic Psychiatry*, 1-2.
- Schildkraut, J., Formica, M. K., & Malatras, J. (2018). Can Mass Shootings be Stopped? *Rockefeller Institute of Government*. <https://rockinst.org/wp-content/uploads/2018/05/5-22-18-Mass-Shootings-Brief.pdf>
- Schildkraut, J., & Elsass, H. J. (2016). Mass shootings: Media, myths, and realities. Bloomsbury Publishing USA.
- Silva, J. R. (2023). Ideologically motivated mass shootings: a crime script analysis of far-right, far-left, and jihadist-inspired attacks in the United States. *Journal of Policing, Intelligence and Counter Terrorism*, 18(1), 1-23.
- 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.
- Silver, J., Simons, A., & Craun, S. (2018). A study of the pre-attack behaviors of active shooters in the United States between 2000 and 2013.
- Taylor, M. A. (2018). A comprehensive study of mass murder precipitants and motivations of offenders. *International journal of offender therapy and comparative criminology*, 62(2), 427-449.
- Vito, C., Admire, A., & Hughes, E. (2018). Masculinity, aggrieved entitlement, and violence: considering the Isla Vista mass shooting. *Norma*, 13(2), 86-102.

Yelderman, L. A., Joseph, J. J., West, M. P., & Butler, E. (2019). Mass shootings in the United States: Understanding the importance of mental health and firearm considerations. *Psychology, public policy, and law*, 25(3), 212.