

Impact of Police Violence on Mental Health: A Theoretical Framework

Police violence has increasingly been recognized as a public health concern in the United States, and accumulating evidence has shown police violence exposure to be linked to a broad range of health and mental health outcomes. These associations appear to extend beyond the typical associations between violence and mental health, and to be independent of the effects of co-occurring forms of trauma and violence exposure. However, there is no existing theoretical framework within which we may understand the unique contributions of police violence to mental health and illness.

This article aims to identify potential factors that may distinguish police violence from other forms of violence and trauma exposure, and to explore the possibility that this unique combination of factors distinguishes police violence from related risk exposures. We identify 8 factors that may alter this relationship, including those that increase the likelihood of overall exposure, increase the psychological impact of police violence, and impede the possibility of coping or recovery from such exposures.

On the basis of these factors, we propose a theoretical framework for the further study of police violence from a public mental health perspective. (*Am J Public Health*. 2020;110:1704–1710. <https://doi.org/10.2105/AJPH.2020.305874>)

Jordan DeVlyder, PhD, Lisa Fedina, PhD, and Bruce Link, PhD



See also Alang, p. 1597.

A new public narrative around the prevalence and effects of police violence has emerged over the past several years in the United States, accompanied recently by a dramatic shift in public opinion following the deaths of George Floyd, Breonna Taylor, and Elijah McClain, and the related national civil uprising and protests. Although Black, Latinx, Native American, and sexual and gender minority communities have long perceived a culture of inequitable treatment, it is only with the widespread adaptation of smartphone technology and real-time dissemination of footage through social media that this has become part of the national consciousness.¹ Media attention has primarily focused on individual incidents of police killings rather than on broader population-level health effects and implications. Although death is certainly the most severe health outcome, it is just as certainly not the most common. The mental health effects of police violence may be less visible yet much more pervasive and, potentially, more impactful when considered across an entire community or population.

In this article, we place the emerging literature on the mental health correlates of police violence within the broader context of research on violence, and explore whether the “police” in “police violence” bestows a specific meaning that extends beyond violence itself—is police

violence a form of violence just like any other? By describing potential factors that may distinguish police violence from other forms of violence and trauma exposure—either as factors that are unique to police violence or that vary in degree between police violence and other forms of violence—we propose a theoretical framework for the further study of police violence from a public mental health perspective.

RELEVANCE OF POLICE VIOLENCE TO MENTAL HEALTH

Stress has pervasive effects on one’s psychological well-being, straining one’s sense of role or purpose and affecting concepts of self-esteem and mastery, which contributes in turn to mental health difficulties.² Although there is not a single unifying theory linking stressful or traumatic social exposures to mental health symptoms, these factors play a prominent etiological role in leading theories on a broad range of disparate mental health conditions, such as the social

signal transduction theory of depression³ or the social defeat theory of psychosis.⁴ Although the often-siloed research of each psychological outcome has led to uniquely labeled theories, these theories all point to a pathway in which trauma spurs biological or psychological changes that manifest over time as psychiatric symptoms, particularly when the trauma is sexually or physically violent.⁵ Further, although theoretical work on stressful life events has attempted to provide a broader framework for how stress may translate to psychopathology, focusing particularly on the role of uncontrollable stressful events that affect one’s usual activities, goals, and values, this framework has not been directly applied toward understanding police violence.⁶

We therefore explore the construct of police violence as a potential etiological factor for mental health conditions, based on the assumptions that (1) violence and trauma are associated with elevated risk for a broad range of mental health symptoms and (2) the contribution to risk may vary not only by severity of exposure, but also by type of

ABOUT THE AUTHORS

Jordan DeVlyder is with the Graduate School of Social Service, Fordham University, New York, NY. Lisa Fedina is with the University of Michigan School of Social Work, Ann Arbor. Bruce Link is with the School of Public Policy and Department of Sociology, University of California, Riverside.

Correspondence should be sent to Jordan DeVlyder, PhD, Graduate School of Social Service, Fordham University, 113 W 60th St, New York, NY 10023 (e-mail: jdevlyder@fordham.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the “Reprints” link.

This article was accepted July 9, 2020.

<https://doi.org/10.2105/AJPH.2020.305874>

exposure. Specifically, we explore whether police violence possesses a unique pattern of characteristics and mechanisms that distinguish it from other forms of violence exposure in its association with mental health symptoms.

For the purposes of this article, we refer generally to “police violence” and “mental health” because there is not yet sufficient research to confidently link specific subtypes of police violence to specific mental health outcomes. We therefore define police violence as acute events of physical, sexual, psychological, or neglectful violence, following the World Health Organization’s guidelines on defining violence and earlier work on the phenomenology of police violence exposure.⁷ Mental health is intended to be inclusive of behaviors and psychological symptoms that would be considered indicators of clinical psychopathology, including but not limited to general psychological distress, posttraumatic stress symptoms, suicidal ideation and behavior, psychosis-like experiences, and depression. These definitions may need to be expanded as this literature develops, as currently it typically focuses on acute violent events (rather than chronic or vicarious exposures) and a psychopathology-oriented view of mental health (rather than a focus on functioning or quality of life), but they are being used here as a reflection of the variables typically employed in the literature at this point in time.

MENTAL HEALTH CORRELATES OF POLICE VIOLENCE

Recent public attention directed toward police violence has spurred an emerging literature on the health significance of police

violence exposure,^{1,8,9} addressing a long-unheeded call to conceptualize police violence as a public health issue in the United States.⁷ Cross-sectional studies have consistently found clinically and statistically significant associations between police violence exposure and a range of mental health outcomes,^{10–16} and community-level data have likewise demonstrated higher rates of mental health symptoms in neighborhoods or cities in which police abuse (e.g., “stop and frisk” practices, which are primarily used in neighborhoods predominantly composed of people of color) and killings of unarmed civilians are more common.^{17,18} These associations have generally been found to remain statistically significant (and of sufficient effect sizes to support public health significance) even with adjustment for closely related forms of violence exposure, such as interpersonal violence or lifetime abuse exposure.^{10,14} For example, exposure to assaultive forms of police violence (i.e., physical or sexual) has been found to be associated with 4- to 11-fold greater odds for a suicide attempt among adults across racial/ethnic groups, even with conservative adjustments.^{12,14} Although most of this research has been conducted with adults, recent analyses suggest that this problem extends into adolescence as well.¹⁹ A selective overview of recent work on this topic is provided in Table 1, and has recently been reviewed elsewhere.²¹

WHY IS POLICE VIOLENCE DIFFERENT?

Overall, accumulated evidence consistently identifies moderate to strong associations

between self-reported exposure to police violence and measures of mental health. Additionally, some evidence indicates that these effects operate independently of exposure to other forms of violence. It was this accumulation of evidence that led us to ask whether and to what extent police violence has unique features that lead it to be so impactful for mental health outcomes. Here, we propose 8 factors that may distinguish police violence from other forms of violence, some of which are unique to police violence and others that may vary by degree. Given the complexity of the issue, we see our conceptualization as a step toward a more complete understanding of this important issue, recognizing that it will need further development in the time ahead.

Police Violence Is State Sanctioned

A long tradition in social science theory suggests that the police play a critical role in disciplining the public, not just in terms of offenses and punishments but in the construction and maintenance of an established social order favoring dominant groups. In light of the use of the police in this regard, it follows that exposure to violence emanating from their actions would have distinct and pernicious features.^{22,23} Police organizations in the United States are thus authoritative institutions legitimized to apply force—and potentially fatal force—to maintain a particular social and political order.²⁴ In interactions with civilians, police officers are in positions of relatively greater power because of both the symbolic and state-sanctioned status of their profession, and their immediate legal availability of means (e.g., guns, batons,

tasers) to wield force, threat of force, and coercion, at their discretion. This distinguishes police violence from interpersonal forms of violence that are perpetrated by people who are not sanctioned to enact violence, such as caregivers, peers, or intimate partners.

This distinction is made not to downplay the seriousness of other forms of violence—such as child abuse, intimate partner violence, or sexual assault—but to assert that modern-day police violence is embedded in historical state-enforced practices that permitted cruel, unusual, and dehumanizing punishment of individuals deemed to be from threatening or “dangerous classes,”²⁵ particularly Blacks. Communities of color and lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities have been historically subjected to racially motivated, discriminatory state-sponsored laws (e.g., Jim Crow laws, sodomy laws) enforced by police that permitted harassment, discrimination, and excessive and fatal force against individuals from these communities. As such, the processes and contexts in which police violence has been historically perpetuated are uniquely distinct from the perpetuation of interpersonal forms of violence by others. Furthermore, police violence is sanctioned not only by institutions in the United States but also by the American public, and is intentionally designed to uphold White supremacy.²⁶ Members of the dominant society thus contribute to police violence and the lack of police accountability.

The Police Are a Pervasive Presence

A core characteristic of many people’s reaction to violence is

TABLE 1—Selective Overview of Recent Studies of Police Violence and Mental Health: United States

Citation	Sample	Exposure	Outcome	Main Findings
Bor et al. ¹⁸	Probability sample of the Black adult subsample of the 2013–2015 Behavioral Risk Factor Surveillance System data (n = 103 710), paired state-level data	No. of recent police killings of unarmed Black US persons in the respondent’s state	No. of days in which the respondent rated mental health as “not good” over past mo	Each police killing was associated with an additional 0.14 poor mental health days.
Bowleg et al. ²⁰	Nonprobability sample of Black men aged 18–44 y residing in Washington, DC (n = 891)	Past-12-mo negative police encounters and police avoidance	Depressive symptoms	Negative police encounters and police avoidance were both associated with depressive symptoms, and mediated the association between incarceration history and depression.
DeVylder et al. ^{11–13, a}	Nonprobability general population sample of residents of Baltimore, MD; New York City; Philadelphia, PA; and Washington, DC (n = 1615)	Lifetime police violence exposure, assessed using the police practices inventory	Psychological distress, depression, psychotic experiences, suicidal ideation, and suicide attempts	Exposure to all subtypes of police violence were associated with most mental health outcomes, largest odds ratios for more assaultive forms of violence (i.e., sexual and physical violence with a weapon).
DeVylder et al. ¹⁴	Nonprobability general population sample of residents of Baltimore, MD, and New York City (n = 1000)	Past-12-mo police violence exposure, assessed using the police practices inventory	Psychological distress, psychotic experiences, suicidal ideation, and suicide attempts	Exposure to all subtypes of police violence was associated with contemporaneous mental health outcomes, largest odds ratios for more assaultive forms of violence (i.e., sexual and physical assault with a weapon), with more extensive adjustments for potential confounders than in the 2017 studies.
Geller et al. ¹⁰	Stratified random sample of young adults (18–26 y) in New York City (n = 1261)	No. and intrusiveness of recent stops by the police	Generalized anxiety symptoms, trauma symptoms related to the incident(s)	Total no. of stops and intrusiveness of stops were associated with PTSD and anxiety symptoms.
Hirschtick et al. ¹⁶	Probability sample of adults residing in Chicago, IL (n = 1543)	Lifetime no. of police stops, aggressive police exposure	PTSD symptoms, depressive symptoms	Total lifetime no. of stops was associated with PTSD symptoms but not depressive symptoms.
Jackson et al. ¹⁹	Secondary analysis of adolescents (average age = 15 y) in the 2014–2017 wave of the Fragile Families & Child Wellbeing Study (n = 918)	Frequency and context of police stops in adolescence	Emotional distress and PTSD symptoms	Frequency and intrusiveness of police stops (but not age of police stops), and being stopped at school, were associated with both outcomes.
Oh et al. ¹⁵	Secondary analysis of the African American subsample of the National Survey of American Life, a national household probability sample (n = 3570)	Lifetime self-reported unfair stops, searches, questioning, or abuse (as a single binary item)	Past-year <i>DSM-IV</i> diagnoses of mood disorders, anxiety disorders, and self-reported suicidal ideation, plans, or attempts	All mental health outcomes were significantly more common among respondents that reported exposure to abusive policing.
Sewell et al. ¹⁷	Probability sample of noninstitutionalized adults in New York City (n = 8797), linked to neighborhood level data (n = 34 neighborhoods)	Neighborhood-level frequency of “stop & frisk” encounters	Psychological distress	Men reported greater psychological distress when neighborhoods experienced a greater frequency of “stop & frisk” policing.

Note. *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (Washington, DC: American Psychiatric Association; 1994); PTSD = post-traumatic stress disorder.

^aAll 3 studies were from the same data set but focused on different outcomes.

avoidance of reminders and triggers—especially of the perpetrators themselves. This common and adaptive response to a harmful situation is not available

to people who have been exposed to police violence. It is simply not possible to avoid a system that inflicts racially motivated violence while staying

within the country, even if one manages to avoid the specific offending officer, and the stress of this police avoidance has been shown to be directly related to

severity of depressive symptoms among adult Black men.²⁰ Much in the same way that police violence by one officer generalizes to fear of all officers even if most

officers do not perpetrate violence, intimate partner violence often generalizes to fear of all romantic partners, particularly of a given gender. However, this process may be exacerbated for victims of police violence and is in some ways different from what transpires when people are exposed to other forms of violence. For example, although victims of intimate partner violence and sexual assault who seek help and legal recourse face enormous barriers and challenges, the US justice system can separate victims from perpetrators through legal protection or restraining orders or through incarceration of the perpetrator. In the case of police violence, the presence of law enforcement in the US context is pervasive, and victims have few or no options to seek help and legal recourse, or to entirely avoid police officers in public places.

There Are Limited Options for Recourse

Victims of police violence have little legal recourse or opportunities for seeking help in the criminal justice system. The police have legal sanction to intervene in other crimes of violence (e.g., sexual assault, physical assault), making it much more difficult to prove that the violence was unjustly or excessively delivered. Additionally, the people reviewing disputed cases are often also police officers, and indicted police officers are tried by prosecutors who must otherwise work with police officers. These and other circumstances make contesting the perpetration of violence extremely difficult. Victims of other forms of violence, particularly intimate partner violence, indeed face enormous barriers in seeking help and legal recourse, including

stigma in reporting intimate partner violence, poverty and other economic barriers, and other sociocultural and contextual factors.²⁷ Victims of police violence face many of these same barriers; because they have few if any options for reporting an incident, for legal recourse, or for advocacy services and referrals to mental health treatment, any mental health symptoms they have may worsen over time.²⁸

Police Culture Deters Internal Accountability

Police violence occurs within a larger, institutional context that is shaped by the organization's culture. An organizational culture that upholds a "code of silence" surrounding police officers' abusive behaviors toward civilians allows for the perpetuation of police abuse of power and can prevent police officers, particularly those from lower ranks, from reporting such abuses to their superiors.²⁹

Given that violence perpetrated through institutions (rather than interpersonal relationships) is supported by an organizational culture condoning harmful behaviors (e.g., harassment, coercion, psychological abuse, physical assault), particularly against those from historically marginalized and disadvantaged communities, experiencing abuse at the hands of police officers who wield such power and authority over civilians may lead to exacerbated mental health consequences. Past research suggests that exposure to sexual assault while serving in the military is associated with psychiatric disorders above and beyond symptoms associated with civilian sexual assault.³⁰ This suggests that contextual factors related to violence, particularly contexts defined by substantial power and

authoritative differentials, may influence associations with mental health symptoms.

Police Violence Alters Deeply Held Beliefs

People feel more secure if they feel safe and protected in their day-to-day activities. Assumptive World Theory proposes that people's deeply held beliefs about the world and themselves can be shaken by an event that forcefully disconfirms such beliefs.³¹ Police violence is particularly likely to provide such disconfirming evidence in that the police represent a societal institution that many, though not all, have come to rely on deeply and implicitly for help when a threat emerges. When police perpetrate violence, this belief is shattered as the police are no longer protectors but rather the central threat that needs to be addressed. Additionally, police violence is normative, rather than an acute or singular event, which has led to the erosion of public trust in the police and favorable views of police seen as protective.

Theories of police legitimacy, which refers to the public's perceptions and views of police as a legitimate authority that is trustworthy and upholds public safety, propose that legitimacy is in part formed through individual police-citizen interactions.³² As such, it is plausible that individual and group experiences with police violence influence individual views and beliefs that police are not trustworthy sources of protection and safety. Of course, this sundering of assumptions occurs with other types of violence, such as when a believed-to-be-loving spouse hits a partner or a thought-to-be-protective parent engages in child abuse. However, the police have been described as a "last resort" for people when other remedies have been tried

and failed.³³ A spouse might call the police as a last resort when other efforts to stop an abusive partner have failed, or a neighbor might make such a call if polite efforts to address enduring abuse of a child have failed. But to the extent that exposure to police violence intrudes, the "last resort" is gone and one may feel stuck in a brutal and frightening world with no recourse.

Racial and Economic Disparities in Exposure

Because police violence is disproportionately directed toward people of color, many of whom are poor, it can underscore a sense of diminished value within the US racial and class hierarchies. Accordingly, the media narrative around police violence has focused on incidents directed toward Black people, and has at times framed these incidents within the context of the legacy of racism and White supremacy in the United States. Data from the first and second Survey of Police–Public Encounters studies have confirmed that—at least in Baltimore, Maryland; New York City; the District of Columbia; and Philadelphia, Pennsylvania—police violence is more likely to be directed toward people of color, although it is notable that these studies have found Latinx groups to be at approximately the same level of risk as non-Latinx Blacks.^{11,14} Although White respondents were also at some risk of exposure to police violence, the racial disparities were significant, even after adjustment for crime involvement and income. Similarly, the prevalence of police-inflicted shootings is approximately 3.5-fold greater among non-Latinx Black than non-Latinx White residents of the United States.³⁴ Perceptions

of racism have been shown to magnify, and perhaps even overshadow, the effects of violent acts.³⁵ Given that police violence is perceived to be racially motivated in many cases,³⁴ it is likely that these same effects carry over to many victims of this form of violence.

Notably, there is insufficient prior data to allow a thorough discussion of police violence and mental health among indigenous populations, although the rate of police killings is extremely high among this group. Other potentially high-risk groups likely include people who identify as sexual or gender minorities, people who are homeless, or those who have a severe mental illness diagnosis, among others. Future research should focus on understudied sociodemographic groups that are disproportionately subject to police violence (e.g., indigenous populations, trans individuals), and the conceptual framework presented in this article will require modification as more data become available.

Police Violence Is Stigmatizing

Victims of violent incidents, such as intimate partner violence and community violence, often seek informal support from friends, family, and other social contacts, which has been shown to have a beneficial impact on mental health.³⁶ However, exposure to police violence carries the potential of inducing harmful stigma. Although stigma may be mitigated in some circumstances in which people distrust the police, a person may nonetheless face judgments from dominant groups who carry the power to discriminate in critical life domains such as educational opportunities, jobs, and housing.

This stigma may in turn limit help-seeking behaviors if mental health problems emerge and if there is a perception that treatment providers may not be able to sufficiently understand the circumstances that led to the mental health problems.³⁷

The police are highly respected in some US communities, sometimes to the point of exaltation, and are supported by a labor union of more than 100 000 workers as well as significant and well-funded public image and advocacy groups such as Blue Lives Matter (which arose as a countermovement to Black Lives Matter and consequently contributes to rather than alleviates concerns of racism and lack of accountability around police violence). As such, there may be substantial stigma around reporting incidents of police violence to family members, friends, and acquaintances, some of whom may have some personal or ideological connection to the police force. Further, when there are major social movements or protests following prominent incidents of police violence, many in the public, particularly those who benefit from the dominant social order that the police help to maintain, take a “blaming the victim” mentality and highlight infractions by the victim that may have justified their injury or death (e.g., the alleged theft of cigarillos by Michael Brown cited as justification for excessive and fatal force). On a broader societal level, protests in Ferguson, Missouri were blamed for a subsequent supposed “war on cops” in which the rate of civilians killing police officers purportedly increased, although there is no actual evidence for any such increase.³⁸

Police Are Typically Armed

Unlike front-line police officers in some other countries, police officers patrolling neighborhoods in the United States are typically armed, which makes civilians’ interactions with the police potentially more threatening. As a result of several landmark Supreme Court decisions, police officers in the United States have a great deal of legal latitude in determining when to use force, and even fatal force. Additionally, the militarization of police in the United States, largely as a result of “War on Drugs” and “War on Terror” policies, has equipped police departments with firearms and military-grade equipment and expanded their capacity to use force if officers believe their lives or the lives of others are in danger.³⁹ Thus, the perceived threat of police victimization in civilians’ interactions with police may lead to unique mental health implications for communities most affected by police violence. Further, in addition to the threat of immediate violence through the use of weapons, police encounters also can lead to a more sustained form of exposure to violence and coercion through imprisonment. This threat may be compounded in geographical (e.g., low-income urban areas) and demographic communities (e.g., Black, Latinx, and Native American) with high rates of incarceration.

PROPOSED CONCEPTUAL MODEL

Figure A (available as a supplement to the online version of this article at <http://www.ajph.org>) portrays a conceptual model illustrating points at which

the influence of police violence on mental health may be different from processes that produce associations between other types of violence exposure and mental health. Specifically, we highlight the 8 potentially influential factors that were described in the previous section, which provides a valuable starting point from which the construct of police violence can be further explored from a public health standpoint. The assumption that police violence is violence like any other would require that the net effect of all of these 8 factors would sum to zero (i.e., have no total effect on mental health). This assumption is highly unlikely, particularly since some of these pathways are now supported by epidemiological evidence (e.g., stress of police avoidance has been recently linked to depressive symptoms).²⁰ Many (but not all) of these features are present in other forms of violence, although the unique intersection of these features may make police violence a specific type of violence and one worthy of study as a separate construct, similar to the intersection of common and specific elements as determinants of the health impact of other life events.⁶ In fact, the literature on stressful life events may provide a useful framework for determining the potential mental health salience of these various features of police violence. Table 2 outlines the primary dimensions of stressful life events based on work by Dohrenwend,⁶ a widely used framework for understanding and interpreting the relationship between uncontrollable stressors and mental health outcomes, and it applies these dimensions to our model of police violence.

To provide a preliminary framework for subsequent work, we have also developed a more complex hypothetical model that

TABLE 2—Police Violence Within the Life Events Dimensions Proposed by Dohrenwend

Dimension	Description	Relevance for Police Violence
Valence	Positive/negative	Police violence is universally of negative valence for the person being victimized.
Fatefulness	Extent to which an event is uncontrollable as opposed to a consequence of the individual's behavior	The power inequities, lack of recourse or accountability, pervasive community presence of the police, and the stigma of reporting police violence all provide a context of fatefulness around police violence. There is evidence that people involved in criminal activities are more likely to be victims of police violence, ¹¹ which would suggest some degree of controllability, although other research has shown that race may be a better predictor of exposure to police violence than the behaviors that elicited police contact. ³⁴
Predictability	Expected likelihood of occurrence	Police violence is more common in the United States than any economically similar country, but is sufficiently rare in many contexts to suggest that it is generally unexpected or unpredictable. There is some evidence that the association between police violence and mental health outcomes is actually stronger among groups that face a lower likelihood of exposure, ¹¹ which may relate to their lower expected likelihood of contact. However, even for groups with higher rates of exposure, each individual incident is likely to be unpredictable.
Magnitude	The amount of effect on one's activities as a result of experiencing the event	The effect of police violence can be of substantial magnitude, as suggested by several features of our model. Most notably, the effects of police violence can result in mortality or a complete restriction of freedom through incarceration, and avoidance of reminders of such incidents is nearly impossible given the pervasive presence of police officers. Though it is obvious that magnitude can be extreme, the magnitude likely varies from circumstance to circumstance, suggesting that research should seek to address this variability.
Centrality	Relation of the event to a person's ability to maintain or achieve their life goals	The top of the centrality hierarchy is threat to life, and violent confrontations with police carry the potential for threat to life given the availability of a firearm. Further, incarceration and being classified as a "felon" further limits one's ability to maintain goals across a variety of life domains.
Physical impact	Direct or indirect physical effects of the life event	Police violence can potentially have significant physical effects, particularly physical assault with a weapon or sexual assault, and these assaultive forms of police violence have been identified as the strongest correlates with a variety of mental health outcomes. ^{11,12,14}
Specific	Specific characteristics of an event that contribute to its impact	Several features of police violence appear to be unique or at least much more significant for police violence compared with other forms of violence, in particular the power inequities (in this case, state rather than individual power), risk of incarceration, and the pervasive community and national presence of police officers.

Source: Dohrenwend.⁶

illustrates potential mechanisms through which the discussed factors may influence the pathways from police violence to mental health (Figure B, available as a supplement to the online version of this article at <http://www.ajph.org>). Although it is speculative because of the limited prior empirical research, we are proposing this model to provide potential conceptual pathways that can be tested in future research. Specifically, 4 of the factors (i.e., access to a weapon, state-sanctioned violence, perceived racial and class biases, and risk of incarceration) are likely to increase the immediate impact of violent incidents and therefore

may have the most direct effects on mental health, as they are characteristics of the acute incident itself. Three of the factors (i.e., pervasive presence, lack of recourse, and stigma of reporting police violence) pertain more to the time following an exposure to violence, and therefore may have an effect on mental health by impeding coping and recovery. Finally, police culture, in combination with the proliferation of firearms in the US general population and the American legacy of racism,²⁴ may have an impact on the overall likelihood or prevalence of police violence.⁴⁰ Future studies can confirm whether these pathways provide

a feasible explanation for the link between police violence and mental health. It is our intention that this preliminary framework may be modified and updated as research evidence accumulates that may confirm or disconfirm these proposed pathways.

CONCLUSIONS AND NEXT STEPS

In this article, we aimed to determine whether it is reasonable to consider police violence exposure to be a unique risk factor for mental distress, independent and conceptually separable from other forms of violence, or

whether such a distinction is unjustified and insufficiently parsimonious. We highlighted several features of police violence that may conceptually distinguish it from other forms of violence. For police violence to be considered effectively similar to other forms of violence exposure, regarding its impact on health, the net effect of these distinguishing features would need to sum to zero, or at least have a clinically insignificant effect. Albeit speculatively, we are confident in stating that this seems highly unlikely. There is now substantial and growing evidence that police violence exposure is associated with a broad range of mental

health outcomes, independent of other forms of violence and stress exposure. To test the proposed model, subsequent studies will need to examine the mechanisms underlying this risk and map those mechanisms onto these proposed features of police violence. **AJPH**

CONTRIBUTORS

J. DeVlyder wrote the original draft of the article. L. Fedina and B. Link contributed substantially to the editing and revision of subsequent drafts of the article. All authors participated in the conceptual development and final editing of the article.

ACKNOWLEDGMENTS

Thank you to Leslie Salas-Hernández for contributing to the selective overview of recent studies on the mental health implications of police violence.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

Institutional approval was not required for this conceptual article, which did not directly involve human participants.

REFERENCES

- Brucato B. The new transparency: police violence in the context of ubiquitous surveillance. *Media Commun.* 2015; 3(3):39–55. <https://doi.org/10.17645/mac.v3i3.292>
- Aneshensel CS. Toward explaining mental health disparities. *J Health Soc Behav.* 2009;50(4):377–394. <https://doi.org/10.1177/002214650905000401>
- Slavich GM, Irwin MR. From stress to inflammation and major depressive disorder: a social signal transduction theory of depression. *Psychol Bull.* 2014;140(3):774–815. <https://doi.org/10.1037/a0035302>
- Selten JP, van der Ven E, Rutten BP, Cantor-Graae E. The social defeat hypothesis of schizophrenia: an update. *Schizophr Bull.* 2013;39(6):1180–1186. <https://doi.org/10.1093/schbul/sbt134>
- Wamser-Nanney R, Howell KH, Schwartz LE, Hasselle AJ. The moderating role of trauma type on the relationship between event centrality of the traumatic experience and mental health outcomes. *Psychol Trauma.* 2018;10(5):499–507. <https://doi.org/10.1037/tra0000344>
- Dohrenwend BP. The role of adversity and stress in psychopathology: some evidence and its implications for theory and research. *J Health Soc Behav.* 2000;41(1):1–19. <https://doi.org/10.2307/2676357>
- Cooper H, Moore L, Gruskin S, Krieger N. Characterizing perceived police violence: implications for public health. *Am J Public Health.* 2004;94(7):1109–1118. <https://doi.org/10.2105/AJPH.94.7.1109>
- American Public Health Association. Addressing law enforcement violence as a public health issue. Available at: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/29/law-enforcement-violence>. Accessed June 18, 2020.
- Alang S, McAlpine D, McCreedy E, Hardeman R. Police brutality and black health: setting the agenda for public health scholars. *Am J Public Health.* 2017;107(5):662–665. <https://doi.org/10.2105/AJPH.2017.303691>
- Geller A, Fagan J, Tyler T, Link BG. Aggressive policing and the mental health of young urban men. *Am J Public Health.* 2014;104(12):2321–2327. <https://doi.org/10.2105/AJPH.2014.302046>
- DeVylder JE, Oh HY, Nam B, Sharpe TL, Lehmann M, Link BG. Prevalence, demographic variation and psychological correlates of exposure to police victimisation in four US cities. *Epidemiol Psychiatr Sci.* 2017;26(5):466–477. <https://doi.org/10.1017/S2045796016000810>
- DeVylder JE, Frey JJ, Cogburn CD, et al. Elevated prevalence of suicide attempts among victims of police violence in the USA. *J Urban Health.* 2017;94(5):629–636. <https://doi.org/10.1007/s11524-017-0160-3>
- DeVylder JE, Cogburn C, Oh HY, et al. Psychotic experiences in the context of police victimization: data from the survey of police–public encounters. *Schizophr Bull.* 2017;43(5):993–1001. <https://doi.org/10.1093/schbul/sbx038>
- DeVylder JE, Jun HJ, Fedina L, et al. Association of exposure to police violence with prevalence of mental health symptoms among urban residents in the United States. *JAMA Netw Open.* 2018;1(7):e184945. <https://doi.org/10.1001/jamanetworkopen.2018.4945>
- Oh H, DeVlyder J, Hunt G. Effect of police training and accountability on the mental health of African American Adults. *Am J Public Health.* 2017;107(10):1588–1590. <https://doi.org/10.2105/AJPH.2017.304012>
- Hirschtick JL, Homan SM, Rauscher G, et al. Persistent and aggressive interactions with the police: potential mental health implications. *Epidemiol Psychiatr Sci.* 2019;29:e19. <https://doi.org/10.1017/S2045796019000015>
- Sewell AA, Jefferson KA, Lee H. Living under surveillance: gender, psychological distress, and stop-question-and-frisk policing in New York City. *Soc Sci Med.* 2016;159:1–13. <https://doi.org/10.1016/j.socscimed.2016.04.024>
- Bor J, Venkataramani AS, Williams DR, Tsai AC. Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study. *Lancet.* 2018; 392(10144):302–310. [https://doi.org/10.1016/S0140-6736\(18\)31130-9](https://doi.org/10.1016/S0140-6736(18)31130-9)
- Jackson DB, Fahmy C, Vaughn MG, Testa A. Police stops among at-risk youth: repercussions for mental health. *J Adolesc Health.* 2019;65(5):627–632. <https://doi.org/10.1016/j.jadohealth.2019.05.027>
- Bowleg L, Maria del Río-González A, Mbaba M, Boone CA, Holt SL. Negative police encounters and police avoidance as pathways to depressive symptoms among US black men, 2015–2016. *Am J Public Health.* 2020;110(S1):S160–S166. <https://doi.org/10.2105/AJPH.2019.305460>
- McLeod MN, Heller D, Manze MG, Echeverria SE. Police interactions and the mental health of black Americans: a systematic review. *J Racial Ethn Health Disparities.* 20120;7(1):10–27. <https://doi.org/10.1007/s40615-019-00629-1>
- Wacquant L. *Deadly Symbiosis: Race and the Rise of Neoliberal Penalty.* Cambridge, UK: Polity Press; 2004.
- Foucault M. *Discipline and Punish: The Birth of the Prison.* New York, NY: Random House; 1977.
- Cooper HL, Fullilove MT. *From Enforcers to Guardians: A Public Health Primer on Ending Police Violence.* Baltimore, MD: Johns Hopkins University Press; 2020.
- Shelden RG, Vasiliev PV. *Controlling the Dangerous Classes: A History of Criminal Justice in America.* Long Grove, IL: Waveland Press; 2017.
- Butler P. The system is working the way it is supposed to: the limits of criminal justice reform. *Georgetown Law J.* 2016; 104(6):1419–1478.
- Overstreet NM, Quinn DM. The intimate partner violence stigmatization model and barriers to help seeking. *Basic Appl Soc Psych.* 2013;35(1):109–122. <https://doi.org/10.1080/01973533.2012.746599>
- Bryant-Davis T, Adams T, Alejandre A, Gray AA. The trauma lens of police violence against racial and ethnic minorities. *J Soc Issues.* 2017;73(4):852–871. <https://doi.org/10.1111/josi.12251>
- Roth S, Cohen LJ. Approach, avoidance, and coping with stress. *Am Psychol.* 1986;41(7):813–819. <https://doi.org/10.1037/0003-066X.41.7.813>
- Surís A, Lind L, Kashner TM, Borman PD. Mental health, quality of life, and health functioning in women veterans: differential outcomes associated with military and civilian sexual assault. *J Interpers Violence.* 2007; 22(2):179–197. <https://doi.org/10.1177/0886260506295347>
- Janoff-Bulman R. Assumptive worlds and the stress of traumatic events: applications of the schema construct. *Soc Cogn.* 1989; 7(2):113–136. <https://doi.org/10.1521/soco.1989.7.2.113>
- Noppe J, Verhage A, Van Damme A. Police legitimacy: an introduction. *Policing.* 2017;40(3):474–479. <https://doi.org/10.1108/PJPSM-05-2017-0058>
- Emerson RM. On last resorts. *Am J Sociol.* 1981;87(1):1–22. <https://doi.org/10.1086/227417>
- Ross CT. A multi-level Bayesian analysis of racial bias in police shootings at the county-level in the United States, 2011–2014. *PLoS One.* 2015;10(11):e0141854. <https://doi.org/10.1371/journal.pone.0141854>
- Nicolaidis C, Timmons V, Thomas MJ, et al. “You don’t go tell white people nothing”: African American women’s perspectives on the influence of violence and race on depression and depression care. *Am J Public Health.* 2010;100(8):1470–1476. <https://doi.org/10.2105/AJPH.2009.161950>
- Scarpa A, Haden SC, Hurley J. Community violence victimization and symptoms of posttraumatic stress disorder: the moderating effects of coping and social support. *J Interpers Violence.* 2006;21(4):446–469. <https://doi.org/10.1177/0886260505285726>
- McCleary-Sills J, Namy S, Nyoni J, Rweyemamu D, Salvatory A, Steven E. Stigma, shame and women’s limited agency in help-seeking for intimate partner violence. *Glob Public Health.* 2016; 11(1–2):224–235. <https://doi.org/10.1080/17441692.2015.1047391>
- Maguire ER, Nix J, Campbell BA. A war on cops? The effects of Ferguson on the number of US police officers murdered in the line of duty. *Justice Q.* 2017; 34(5):739–758. <https://doi.org/10.1080/07418825.2016.1236205>
- Lieblich E, Shinar A. The case against police militarization. *Mich J Race Law.* 2017;23:105.
- Mesic A, Franklin L, Cansever A, et al. The relationship between structural racism and black–white disparities in fatal police shootings at the state level. *J Natl Med Assoc.* 2018;110(2):106–116. <https://doi.org/10.1016/j.jnma.2017.12.002>