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The role of state social service spending in moderating mental health outcomes of community violence: A spatial meta-analysis

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ABSTRACT

Community violence is an epidemic in the United States. Studies estimate almost 30% of youth experience community violence, with higher rates in low-income urban settings. Community violence exposure is consistently linked to adverse mental health outcomes, including post-traumatic stress, internalizing, and externalizing symptoms. In response, nationwide efforts have emphasized increased financial investment in social services as a potential means to mitigate the impact of violence exposure. Yet, gaps remain in understanding whether structural investments (i.e., social service expenditures) moderate mental health outcomes. This study aimed to: (1) provide an updated examination of the associations between community violence exposure and mental health outcomes, and (2) test whether state-level social service expenditures moderated these associations. We conducted a spatial meta-analysis using a three-level random-effects model, linking study data to publicly available Census expenditures data. A total of 155 studies representing 23 states yielded 769 effect sizes. Results indicated a significant small-to-moderate positive association between community violence and mental health (Fisher's $z = 0.22$, $p < .0001$; 95% CI [0.20, 0.24]), with heterogeneity across studies ($Q = 9524.4$, $df = 768$, $p < .0001$). Public welfare, hospital, and veterans' services spending weakened the positive associations with somatic, post-traumatic stress, and general stress outcomes. By contrast, public welfare, employment security, and health spending amplified the positive associations with internalizing and somatic outcomes. Findings underscore the enduring mental health burden of community violence, the potential role of targeted policy investments, and the need for cross-disciplinary research to clarify how psychological and structural factors impact mental health outcomes among those exposed to community violence.

1. Introduction

Community violence, defined as witnessing or being a victim of acts such as assaults, shootings, and robberies, as well as hearing gunfire in one's community outside of the home, is an epidemic in the United States (DeCou and Lynch, 2017; Finkelhor, 2020). National estimates indicate that nearly 30% of American youth are affected by community violence (Finkelhor et al., 2010, 2015). Community violence, whether experienced directly through victimization or indirectly through witnessing or hearing about violence in one's community, has been consistently associated with adverse mental health outcomes, including post-traumatic stress, internalizing symptoms, externalizing behaviors, and other emotional and behavioral problems across youth and adulthood (Baiden et al., 2026; Castellví et al., 2017; Cooley-Strickland et al., 2009; Fowler et al., 2009; Kirk and Hardy, 2014; Lynch, 2003; Margolin and Gordis, 2000; Miliauskas et al., 2022; Tache et al., 2020; Vermeiren et al., 2003; Zinzow et al., 2009). Administrative records (e.g., crime and homicide statistics) and self-report data show that community violence impacts people across the lifespan, from childhood socioemotional difficulties (Ahmad et al., 2022; Brady et al., 2024) to adult mental health problems (Ginzburg et al., 2022; Joshi et al., 2017; Kliewer and Zaharakis, 2013). However, violence varies considerably across U.S. regions,

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reflecting structural factors (e.g., poverty, systemic inequities, uneven access to resources) that concentrate its burden in specific neighborhoods (Bailey et al., 2017; Frazer et al., 2018; Grinshteyn and Hemenway, 2016; Johnson et al., 2021; Margolin and Gordis, 2000; Stein et al., 2003; Unnever et al., 2023; Uzzi et al., 2024; Williams and Cooper, 2019). Therefore, understanding the community violence-mental health association may benefit from examining not only direct relationships, but also how this association intersects with the geographic and structural contexts in which people live.

To date, the most comprehensive meta-analysis examining community violence and its association with a range of mental health outcomes was published over fifteen years ago (Fowler et al., 2009). Since then, there has been a substantial increase in the research on community violence (see Fig. 1), alongside significant societal changes including the COVID-19 pandemic which exacerbated rates of community violence (e.g., violence rates in Connecticut rose by 55% during the COVID-19 pandemic; O'Neill et al., 2023). Further, prior meta-analyses have largely focused on post-traumatic stress, internalizing, and externalizing symptoms (Castellví et al., 2017; Fowler et al., 2009; Miliauskas et al., 2022; Wilson and Rosenthal, 2003). However, emerging evidence suggests that community violence is also linked to other mental health outcomes that have not yet been systematically synthesized, including substance use, somatic symptoms, and eating disorder symptoms (Isaksson et al., 2024; Lambert et al., 2008; Rouhakhtar et al., 2019; Wright et al., 2016), highlighting a gap in the literature and underscoring the need for broader investigation into the diverse mental health impacts of community violence.

Acknowledging the mental health toll of community violence and its relation to structural inequities has strengthened nationwide calls for prevention strategies centered on public health policy and economic investment. In 2021, the Biden-Harris administration announced initial actions to address what it termed the "gun violence public health epidemic" (The White House, 2021), and as a part of these efforts, established the first federal office dedicated to coordinating a comprehensive, public health-oriented response to gun violence (The White House, 2023). Similarly, in June 2024, U.S. Surgeon General Dr. Vivek Murthy issued an advisory declaring community violence a public health crisis in America (U.S. Department of Health and Human Services, 2024). Both initiatives emphasized the need for investment in community-based interventions and mental health resources to combat community violence and its resulting mental health consequences. This

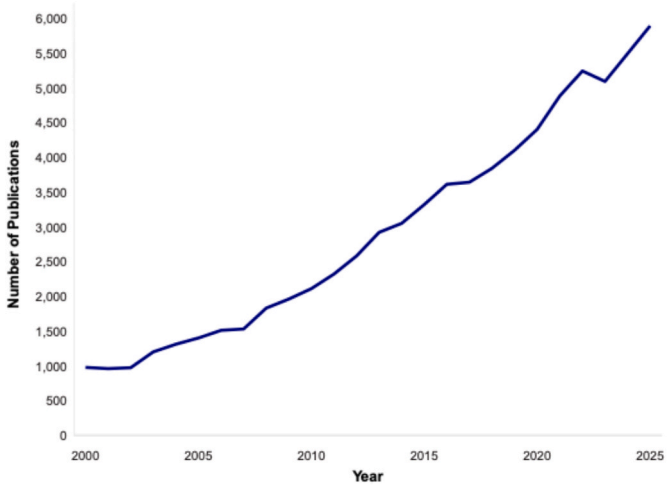

Fig. 1. Trends in approximate publications mentioning "community violence" from 2000 to 2025.
Note. Trends in the approximate number of publications mentioning "community violence," based on Google Scholar search results retrieved on February 24, 2026.

priority is reinforced by the staggering economic and social costs of violence (Davis, 2011) and by evidence that greater spending on social and public health services is associated with less violent crime (Apel, 2025; Jacoby, 2018; Palatucci and Monheit, 2022; Sipsma et al., 2017). As one example, Sipsma and colleagues (2017) found higher state spending on social and public health services was linked to lower homicide rates. However, much of the previous work has taken three main approaches: examining single categories of spending (e.g., mental health spending) in isolation, combining categories of spending into a composite measure of "social services," or focusing on the impact of social service investments on the prevalence of violence. These strategies have been valuable for establishing broad associations and demonstrating the protective potential of social investment. At the same time, they leave open questions about whether different types of spending exert distinct or even opposing effects and whether social service investment conditions the mental health consequences of community violence exposure. Disaggregating social service and mental health categories can therefore provide a more nuanced understanding of how social service investments impact mental health outcomes in violence-affected communities.

Overall, the expanding research on community violence, the gaps in prior meta-analyses, and the shifts in spending aimed at addressing violence exposure underscore the need for an updated analysis that incorporates contextual factors (specifically, economic investment in social services) to better understand the association between community violence exposure and mental health outcomes. The present study had two aims. First, we examined associations between community violence exposure and mental health problems across a range of mental health outcomes. In a series of sensitivity analyses, we examined whether associations differed across key study and sample characteristics, including type of community violence exposure (direct vs. indirect), measurement approach (administrative vs. self-report), and age group, and whether the observed moderation effects remained after accounting for state-level wealth (gross domestic product [GDP]) as a potential confound.

Second, we tested whether state-level social service expenditures moderate the association between community violence and mental health outcomes. From a social ecological perspective (Bronfenbrenner, 2000; Bronfenbrenner and Morris, 2007), individuals are shaped both by proximal experiences and by the broader structural conditions in which those experiences occur. In the context of the present study, the social ecological perspective suggests that community violence exposure operates within larger structural conditions that may influence its impact on mental health. Building on this perspective, structural determinants of health frameworks (Armstead et al., 2021; Buggs et al., 2022; Chen and Miller, 2013) further specify that one key feature of these structural conditions is the distribution of social and economic resources, which can shape the conditions under which vulnerability to community violence and its resulting mental health consequences emerge (Chen and Miller, 2013). Following research using the structural determinants of health frameworks, we focus on state-level social service spending as a measurable indicator of resource distribution, such that equivalent levels of exposure may be associated with fewer mental health problems in states with greater social service investment. To date, however, no empirical work has examined whether state-level social service investment influences the strength of the association between community violence exposure and mental health outcomes across contexts. We used a spatial meta-analytic approach (Johnson et al., 2017), which links study-level effect sizes to the geographic contexts in which the studies were conducted. This approach extends conventional meta-analysis by incorporating spatial variation in study environments, allowing us to examine whether differences in state-level investments help explain heterogeneity in associations between community violence and mental health outcomes. Guided by national policy initiatives that emphasize economic investment to address the public health crisis of community violence and its impact on mental health (The White House,

2023, 2021; U.S. Department of Health and Human Services, 2024), we focus specifically on state-level social service investments as a potential lever of change.

2. Method

2.1. Search strategy

A systematic search was conducted across the PsycINFO, PubMed, Medline, and CINAHL databases. Search terms were adapted from and expanded upon those used in prior meta-analyses of community violence exposure and mental health (see Table 1 for search terms) (Castellví et al., 2017; Fowler et al., 2009). Articles were retrieved on July 31st, 2024, with data collected from studies published between January 1992 and July 31st, 2024 (in line with available Census data). A total of 7940 records were initially identified, of which 3124 were found to be duplicates. The titles and abstracts of the remaining studies were screened, and 960 articles were reviewed in full text. We also reviewed articles from other meta-analyses on community violence exposure and mental health outcomes and identified additional relevant studies (n = 9) (Fowler et al., 2009; Wilson and Rosenthal, 2003). A total of 155 studies met the inclusion criteria (see below) and were included in the final analysis (see Fig. 2 for Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA] flowchart).

Table 1
Search terms.

Database	Search Fields	Search Terms	Limits
PsycINFO	Title (TI), Abstract (AB), Subject (SU), Descriptor (DE), Keywords (KW)	**Community violence terms**: 'community violence', 'urban violence', 'neighborhood violence', 'gun violence', 'community crime', 'neighborhood crime', 'neighborhood danger', 'neighborhood safety', 'community safety', 'community danger', 'homicide', 'exposure to community violence', 'exposure to neighborhood violence', 'urban violence' **Mental health terms**: 'mental health', 'serious mental illness', 'anxiety', 'depression', 'externalizing', 'post-traumatic stress', 'PTSD', 'psychosis', 'schizophrenia', 'obsessive compulsive disorder', 'attention-deficit hyperactivity disorder', 'mental illness', 'internalizing', 'psychological symptoms', 'psychiatr*', 'conduct disorder', 'impulsiv*', 'psychological stress', 'substance use', 'substance dependence', 'drug abuse', 'addiction', 'substance abuse', 'alcohol abuse', 'alcohol dependence', 'bipolar disorder', 'eating disorder', 'self-harm', 'suicid*', 'behavioral disorder', 'personality disorder', 'somatic' **USA terms**: 'USA', 'United States', 'America', 'US', 'United States of America'	1992 – onward, Peer Reviewed
CINAHL	Title (TI), Abstract (AB), Subject (SU), Descriptor (DE), Keywords (KW)	Same terms as PsycINFO[a]	1992 – onward, Academic Journals
Medline	Title (TI), Abstract (AB), Subject (SU), Descriptor (DE), Keywords (KW)	Same terms as PsycINFO[a]	1992 – onward, Academic Journals
PubMed	n/a	Same terms as PsycINFO[a]	1992 – onward

Note.[a]The same community violence, mental health, and USA search terms used in PsycINFO were also applied to CINAHL, Medline, and PubMed.

2.2. Inclusion and exclusion criteria

Studies were included if they: (1) were conducted in the United States (to enable geocoding with Census data); (2) assessed community violence in participants' neighborhoods (excluding domestic violence or maltreatment); (3) were published in English; (4) assessed at least one mental health outcome; (5) provided, or allowed calculation of, direct bivariate correlations between community violence and mental health outcomes; (6) were published after 1992 (to align with available Census data); (7) were peer-reviewed (excluding dissertations and conference abstracts); (8) had identifiable state locations; and (9) examined community violence exposure as the predictor and mental health as the outcome. Both cross-sectional and longitudinal studies were eligible, provided community violence was measured first or concurrently with mental health. Longitudinal studies that used mental health to predict later community violence (e.g., Lambert et al., 2011) were excluded, as they did not align with the temporal focus of the present study.

Studies were excluded if they: (1) related to political conflicts and war (e.g., Boston Marathon bombing [Crum et al., 2018], September 11th terrorist attacks [Calderoni et al., 2006; DiGrande et al., 2008]); (2) focused on community mental health rather than person-level outcomes (e.g., neighborhood-level suicide occurrence, Colson et al., 2016); (3) addressed generic wellness indicators such as life satisfaction or happiness; (4) provided insufficient information to determine whether violence exposure occurred outside the home (5) assessed only general neighborhood safety (e.g., "I feel safe in my neighborhood"); rather than specific exposure to community violence; or (6) did not report effect sizes or provide sufficient statistical information (e.g., means, standard deviations, sample sizes, or test statistics). Studies that combined exposures across settings (e.g., household, school, and community) were excluded unless community-specific effect sizes were reported.

2.3. Screening procedures and reliability

The first author (JR) conducted an initial screen of all papers to determine their eligibility for inclusion or exclusion. Missing PDFs were requested through Yale University's Interlibrary Loan service. If the PDFs were still unavailable after this process, the articles were marked as missing. Additionally, if a study referred readers to another publication for details on participants' location, we reviewed the cited source to determine the state in which the study was conducted.

Reliability checks were performed collaboratively by trained research assistants to ensure consistency. An independent coder (trained research assistant) reviewed a randomly selected 10% subset of full-text articles and applied the inclusion/exclusion criteria. Agreement was defined as both coders making the same include/exclude decision for a given paper. Across these double-coded articles, the percent agreement was 85%. Discrepancies were resolved through discussion until consensus was reached. All final inclusion and exclusion decisions were then reviewed and confirmed in consultation with the senior author (ABS).

2.4. Defining community violence exposure

Community violence exposure was defined as direct or indirect exposure to violent events occurring in participants' neighborhoods.

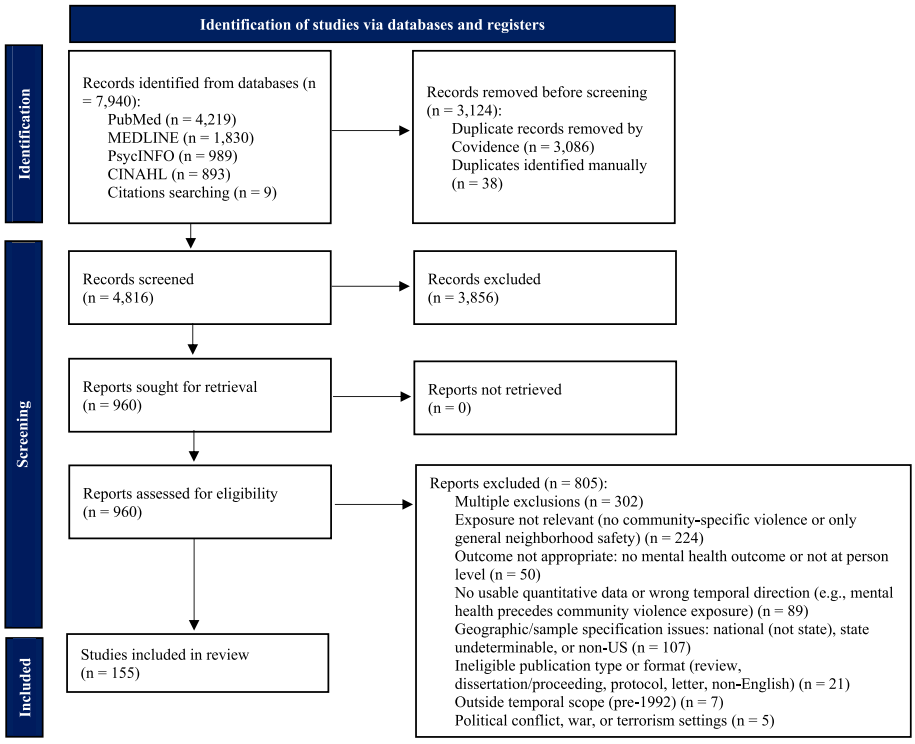

Fig. 2. PRISMA Flow Chart
Note: PRISMA flow chart adapted from Page et al. (2021).

Direct exposure included experiences of victimization, such as being personally attacked, threatened, or otherwise harmed, whereas indirect exposure included witnessing violence or hearing about violent events that occurred in one's community. 82 studies did not report separate estimates for different forms of community violence exposure. 38 studies reported both victimization and witnessing effect sizes, 8 studies reported victimization effect sizes only, and 27 studies reported witnessing effect sizes only. In total, 46 studies contributed 203 effect sizes assessing direct victimization, and 65 studies contributed 285 effect sizes assessing indirect exposure.

We coded community violence exposure as measured in two ways: (1) administrative data, such as police records, geocoded crime statistics, or other administrative data linked to participant addresses; and (2) self-report measures, including questionnaires or interviews assessing whether individuals experienced, witnessed, or heard of violence in their community. We also coded participants' age at the time of the assessment, categorizing studies as focusing on youth (≤17 years), adults (≥18 years), or mixed age samples (including both youth and adults).

2.5. Extracting effect sizes

All effect sizes were calculated as Pearson's r. Some effect sizes needed to be converted from other metrics (e.g., odds ratios, Cohen's D, partial eta^2) to Pearson's r (Borenstein, 2009; Chinn, 2000; Peterson and Brown, 2005). A negative sign was assigned to correlations where community violence exposure was inversely related to mental health problems. All effect sizes were transformed to Fisher's z to stabilize variance and normalize the sampling distribution, following standard practice in meta-analysis of correlations (Borenstein et al., 2010).

To ensure comparability across studies, we prioritized extracting zero-order correlations (i.e., correlations that did not control for covariates) unless only adjusted statistics were available, in line with previous meta-analyses (Fowler et al., 2009). Using zero-order correlations allows for a more standardized and interpretable synthesis of associations across studies, as adjusted models often vary widely in the number and type of covariates included, which can obscure cross-study comparisons (Hunter and Schmidt, 2004). When a study reported the same community violence-mental health association from multiple informants, we prioritized the youth's self-report to capture their own subjective experience of distress because self-reports may more accurately index internal states than external observations (De Los Reyes and Kazdin, 2005). If the community violence-mental health association was reported only by parents and/or teachers, we extracted those effect sizes.

To avoid inflating the influence of certain samples, if multiple studies drew from the same sample, effect sizes were extracted only for new information not already included, with preference given to the study with the largest sample size when overlapping studies reported on the same outcome. For example, if one study reported associations between community violence exposure and both internalizing and externalizing outcomes, and a later study using the same sample reported only the community violence exposure-externalizing association, we did not extract the effect size for community violence exposure-externalizing again. However, if the second study provided a new mental health outcome not previously included, we incorporated that effect size. Additionally, we extracted main effects rather than interaction effects. If a study only reported effect sizes within subgroups (e.g., separately for men and women) and did not provide sufficient statistical information to compute an effect size for the full sample, it was excluded (n = 13) in order to focus on synthesizing general associations across studies rather than exploring subgroup-specific patterns. When multiple spatial radii [defined as the geographic distance from a participant's home within which a violent incident (e.g., homicide) was recorded] were reported, we extracted the effect size for the smallest radius (e.g., 1500 ft) to capture the most acute, proximal exposure most relevant to children's

mental health outcomes (Sharkey et al., 2012).[1]

2.6. Contacting authors for location information

If an article met all other inclusion criteria (e.g., assessed mental health outcomes, evaluated community violence exposure, and tested the association between these variables) but did not report the location of the participants, we attempted to contact the corresponding authors to obtain information about the study location. We did not receive responses from nine authors, and two articles provided no valid contact details. As a result, these eleven studies were excluded from the analysis.

2.7. State social services expenditures

We obtained information on state expenditures towards social services from the Census's Annual Survey of State and Local Government Finance Tables (U.S. Census Bureau, 2025). These data provided annual expenditure information for all 50 U.S. states and the District of Columbia from 1992 to 2022 at the time of article extraction. Expenditure data are collected from all state governments using uniform expenditure definitions, which allows for consistent comparisons across states. This is an advantage over local-level data, where social service categories are often defined, categorized, and reported differently across jurisdictions. The Census categorizes expenditures by governmental function (e.g., education, public safety, transportation, social services). Based on prior research linking social service investment to community violence and mental health (Jacoby, 2018; Sipsma et al., 2017), we focused specifically on social service categories, including public welfare (e.g., cash assistance such as TANF, job training, child welfare services), hospitals (e.g., operation of government-owned hospitals), health (e.g., public health programs, disease prevention, infrastructure investment), employment security (e.g., unemployment services, job centers), and veterans' services that provide direct benefits to veterans and their families (e.g., outreach, claims assistance, housing, and health care (Cozza et al., 2014)). All expenditures were inflation-adjusted to 2022 dollars using the Consumer Price Index (Church, 2016; U.S. Bureau of Labor Statistics, 2022) and to per-capita estimates to account for differences in state population size, allowing for more meaningful spending comparisons across states and years.

For the 50 states, we used expenditure data from the state government. For Washington, D.C., the Census reports zero values under "state government" because it is not classified as a state and instead lists expenditures under "local government". We therefore used local government values for D.C. to capture its spending. We matched expenditure data to studies using the publication year of each article, as data collection years were not reported in over half of the included studies. For articles published up to 2022, we used expenditure data from the corresponding year. However, if data for a specific year were unavailable (i.e., 2001 and 2003), we used the most recent data available prior to that year (i.e., 2000 and 2002, respectively). For articles published after 2022, we used the most recent available expenditure data (i.e., from 2022), as the State and Local Government Finances Tables did not have data beyond that year at the time of data collection.

2.8. Data analytic strategy

We applied a three-level random effects model. This approach accounts for three sources of variability: 1) sampling error for each individual effect size, representing the precision of the estimates; 2) variation among multiple effect sizes within the same study, capturing within-study differences; and 3) differences in effect sizes across studies, reflecting study-level factors. State-level social service expenditure variables were entered as study-level moderators. The general form of the meta-regression model was:

$$z_{ijk} = \beta_0 + \beta_1(\text{Social Services Expenditures}_k) + u_k + v_{jk} + e_{ijk}$$

where z_{ijk} represents the Fisher's z-transformed effect size i from outcome j in study k; β_0 is the overall pooled effect; β_1 represents the moderation effect of state-level social service expenditures; u_k is the random effect for study; v_{jk} is the random effect for multiple outcomes within studies; and e_{ijk} represents sampling error.

Moderation effects were examined using both unstandardized and standardized coefficients. Unstandardized coefficients (B per $100) reflect the change in the Fisher's z-transformed association between community violence exposure and mental health outcomes for each $100 increase in per-capita state social service spending (Table 2). Standardized coefficients (β) were calculated by z-scoring the spending variables before fitting the model, such that the coefficients represent the change in the Fisher's z association associated with a one standard deviation increase in per-capita state social service spending (Results; Table 2). In sensitivity analyses, we re-estimated all models controlling for state-level wealth, operationalized as gross domestic product per capita (GDP; U.S. Bureau of Economic Analysis, 2025). This allowed us to test whether the moderation effects remained after accounting for differences in overall state economic resources. Because GDP data were only available beginning in 1998 (U.S. Bureau of Economic Analysis, 2025), studies with observation years prior to 1998 were assigned the 1998 GDP value.

Finally, to assess potential publication bias, we visually inspected funnel plots for evidence of asymmetry. We then conducted an Egger's regression test for funnel plot asymmetry within the three-level meta-analytic framework. Specifically, we fit a meta-regression model with the square root of the sampling variance (i.e., the standard error) as a moderator, using the same random effects structure as the primary analysis (random intercepts for study and outcome within study). A significant coefficient for the standard error term indicates asymmetry in the funnel plot, which may reflect publication bias or small-study effects. This approach follows recommendations for adapting Egger's test to multilevel meta-analytic models (Egger et al., 1997; Fernández-Castilla et al., 2021). All statistical analyses were conducted in the R version 4.3.1 using the metafor and meta packages (R Core Team, 2023).

3. Results

3.1. Study characteristics

We identified 155 final articles, which yielded a total of 769 effect sizes ranging from $r = -0.50$ to 0.60. The most commonly studied mental health outcomes were post-traumatic stress symptoms and/or disorder (k = 258), followed by internalizing symptoms and/or disorders (k = 197) and externalizing symptoms and/or disorders (k = 166). Other frequently examined outcomes included general stress (k = 33), substance use (k = 64), suicidal thoughts and behaviors (k = 19), somatic symptoms (k = 10), callous-unemotional traits or behaviors (k = 8), emotion regulation difficulties (k = 7), and eating-related outcomes (k = 4). Less commonly assessed outcomes included psychotic symptoms (k = 1) and "other" outcomes not fitting these categories (k = 2, i.e., rumination, borderline personality disorder). A detailed summary of the types of mental health outcomes studied is presented in Fig. 3. The studies represent data across 23 states, with the majority of study samples coming from Illinois, New York, California, and Maryland. Fig. 4 provides a detailed summary of the article locations. Details about each included study are provided in Supplemental Table 1.

[1] Variation in the spatial scale of community violence exposure can influence observed relationships between community violence and mental health (Colson et al., 2016; DaViera and Roy, 2020; Gard et al., 2022). However, most studies did not capture or report this level of detail, so we were unable to document the spatial level.

Table 2
Moderation effects of state social service expenditures on mental health outcomes (unstandardized and standardized coefficients).

Mental Health Outcome	Spending Category	B (per $100)	β	*p*
Internalizing	Public Welfare	0.0024†	0.0283†	0.065
	Hospitals	0.0194†	0.0303†	0.056
	Health	0.0114*	0.0313*	0.032
	Employment Security	0.1888*	0.0353*	0.013
	Veterans Services	−0.1537	−0.0050	0.716
Externalizing	Public Welfare	−0.0009	−0.0077	0.655
	Hospitals	0.0134	0.0285	0.138
	Health	−0.0020	−0.0022	0.883
	Employment Security	0.0877	0.0116	0.457
	Veterans Services	0.4330	0.0164	0.287
Post-Traumatic Stress	Public Welfare	0.0010	0.0077	0.696
	Hospitals	−0.0152	−0.0215	0.310
	Health	−0.0044	−0.0037	0.754
	Employment Security	0.1668	0.0169	0.183
	Veterans Services	−1.3898*	−0.0280*	0.034
Suicide	Public Welfare	−0.0034	−0.0239	0.400
	Hospitals	−0.0117	−0.0184	0.554
	Health	−0.0102	−0.0110	0.731
	Employment Security	−0.0835	−0.0087	0.778
	Veterans Services	1.1587	0.0135	0.696
Substance Use	Public Welfare	0.0031	0.0194	0.455
	Hospitals	−0.0044	−0.0097	0.764
	Health	−0.0166	−0.0167	0.568
	Employment Security	0.0824	0.0111	0.780
	Veterans Services	−0.9118	−0.0279	0.285
General Stress	Public Welfare	−0.0053*	−0.0448*	0.043
	Hospitals	0.0059	0.0094	0.763
	Health	−0.0394	−0.0280	0.308
	Employment Security	0.0039	0.0004	0.989
	Veterans Services	−1.3447	−0.0372	0.127
Somatic Symptoms	Public Welfare	0.0175*	0.1062*	0.024
	Hospitals	−0.0693***	−0.0985***	<0.001
	Health	0.1449†	0.0872†	0.141
	Employment Security	−1.1135*	−0.1073*	0.039
	Veterans Services	10.1300	0.0745	0.439

Note. All state spending variables were adjusted for inflation to constant 2022 US dollars using the Consumer Price Index. B per $100 (unstandardized) = change in Fisher's z per $100 increase in per-capita spending. β (standardized) = change in Fisher's z correlation for every 1-SD increase in per-capita spending. Mental health outcomes with too few effect sizes (k < 10, i.e., psychosis, callous-unemotional traits, eating, emotion regulation, and "other") were excluded from moderator testing (Borenstein, 2009). ***$p < .001$; **$p < .01$; *$p < .05$; †$p < .10$.

3.2. Overall effect size

The overall effect based on the three-level random-effects meta-analytic model examining the association between exposure to community violence and all mental health outcomes was significant (Fisher's z = 0.217, SE = 0.011; z = 19.60, $p < .0001$; 95% CI [0.195, 0.239]). The model revealed significant heterogeneity (Q = 9524.44, df = 768, $p < .0001$), suggesting substantial variability across studies. The distribution of effect sizes across studies is depicted in the forest plot (Fig. 5).

3.3. Associations by mental health outcome

Three-level random-effects models were estimated to examine how the association between community violence exposure and mental health outcomes varied across mental health categories. Post-traumatic stress symptoms showed the largest positive association with community violence exposure (Fisher's z = 0.256, 95% CI [0.212, 0.300], $p < .001$; k = 258 effect sizes from 45 studies), followed by externalizing problems (Fisher's z = 0.247, 95% CI [0.212, 0.283], $p < .001$; k = 166 from 59 studies) and somatic symptoms (Fisher's z = 0.226, 95% CI [0.084, 0.368], $p = .002$; k = 10 from 5 studies). Significant positive associations also were observed for emotion regulation difficulties (Fisher's z = 0.225, 95% CI [0.154, 0.295], $p < .001$; k = 7 from 4 studies), substance use (Fisher's z = 0.208, 95% CI [0.156, 0.259], $p < .001$; k = 64 from 24 studies), internalizing symptoms (Fisher's z = 0.196, 95% CI [0.163, 0.228], $p < .001$; k = 197 from 86 studies), general stress (Fisher's z = 0.179, 95% CI [0.124, 0.234], $p < .001$; k = 33 from 15 studies), suicidal outcomes (Fisher's z = 0.093, 95% CI [0.036, 0.150], $p = .001$; k = 19 from 8 studies), and eating disorder outcomes (Fisher's z = 0.063, 95% CI [0.024, 0.101], $p = .001$; k = 4 from 1 study). The association between community violence exposure and callous-unemotional traits was not statistically significant (Fisher's z = 0.165, 95% CI [−0.049, 0.378], $p = .13$; k = 8 from 2 studies). These findings indicate that community violence exposure is associated with a range of mental health outcomes across domains (see Fig. 6 for a visual summary of pooled effect sizes across each mental health outcome category).

3.4. Publication bias

Publication bias assessment using Egger's regression test revealed significant funnel plot asymmetry. We included the standard error of effect sizes (sqrt(vi)) as a moderator in our three-level meta-analytic model, which showed a significant positive relationship between the standard error and effect size (coefficient = 1.01, SE = 0.35, t = 2.93, $p = .003$). These findings suggest that the overall pooled effect size may be inflated due to the selective publication or reporting of stronger effects among smaller studies. See Fig. 7 for the funnel plot.

3.5. Social services expenditures as moderators

We first examined whether specific types of state-level social service expenditures (public welfare, hospitals, health, employment security, and veterans' services) moderated the overall association between community violence exposure and mental health outcomes. Results from a three-level meta-regression model indicated that none of the tested social service expenditure categories (public welfare, hospital spending, health spending, employment security, and veterans' services) significantly moderated the overall community violence exposure-mental health association.

We then examined whether each specific type of state-level social service expenditures moderated the association between community violence exposure and specific mental health outcomes (post-traumatic stress, internalizing, externalizing, general stress, substance use, suicidal thoughts and behaviors, and somatic symptoms) (Table 2). Mental health outcomes with too few effect sizes (k < 10, i.e., psychosis, callous-unemotional traits, eating, emotion regulation, and "other") were excluded from moderator testing (Borenstein, 2009). Results indicated that higher hospital spending moderated the positive association between community violence exposure and somatic symptoms, such that higher spending weakened the positive association between community violence exposure and somatic symptoms ($\beta = -0.10$, $p < .0001$). Employment security spending moderated the positive association between community violence exposure and internalizing symptoms, with more spending amplifying the positive association between community violence exposure and internalizing ($\beta = 0.04$, $p = .013$), but more employment security spending weakened the positive association between community violence exposure and somatic symptoms ($\beta = -0.11$, $p = .04$). Veterans' services spending moderated the positive association between community violence exposure and post-traumatic stress, such

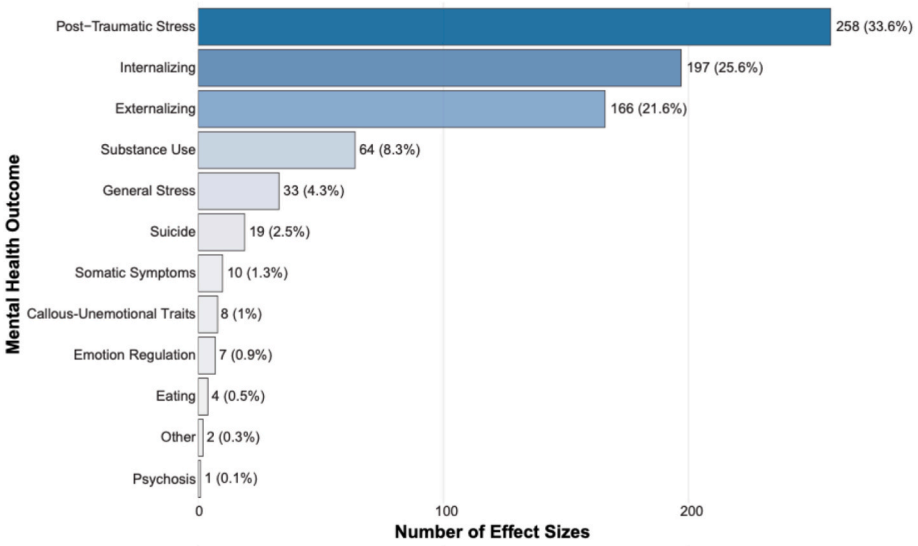

Fig. 3. Distribution of effect sizes across mental health outcomes
Note. Bars reflect the number of effect sizes (k) associated with each mental health outcome. Percentages (in parentheses) represent the proportion of effect sizes in the meta-analysis for each mental health outcome category. Post-traumatic stress, internalizing, and externalizing outcomes together account for over 80% of all effect sizes included in the meta-analysis.

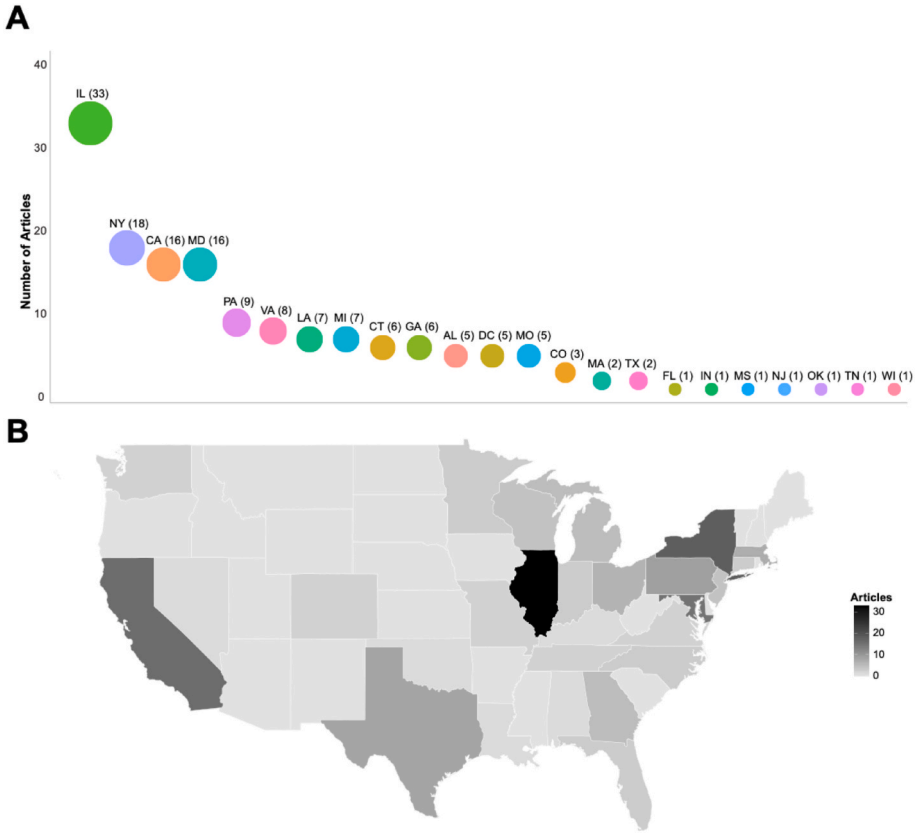

Fig. 4. State distribution of articles included in the meta-analysis
Note. **Panel A** ranks U.S. states by the number of articles contributed to the meta-analysis. Point size represents number of articles contributed by each state. States ordered by contribution level (highest to lowest number of articles contributed to analyses). **Panel B** shows the geographic distribution of these studies, with darker shading indicating more articles contributed per state. Illinois, New York, California, and Maryland together account for more than half of all articles included in the analysis.

that higher spending weakened the association between community violence exposure and post-traumatic stress ($\beta = -0.03$, $p = .03$). Health spending moderated the positive association between community violence exposure and internalizing symptoms, with more spending amplifying the positive association between community violence exposure and internalizing ($\beta = 0.03$, $p = .03$). Public welfare spending

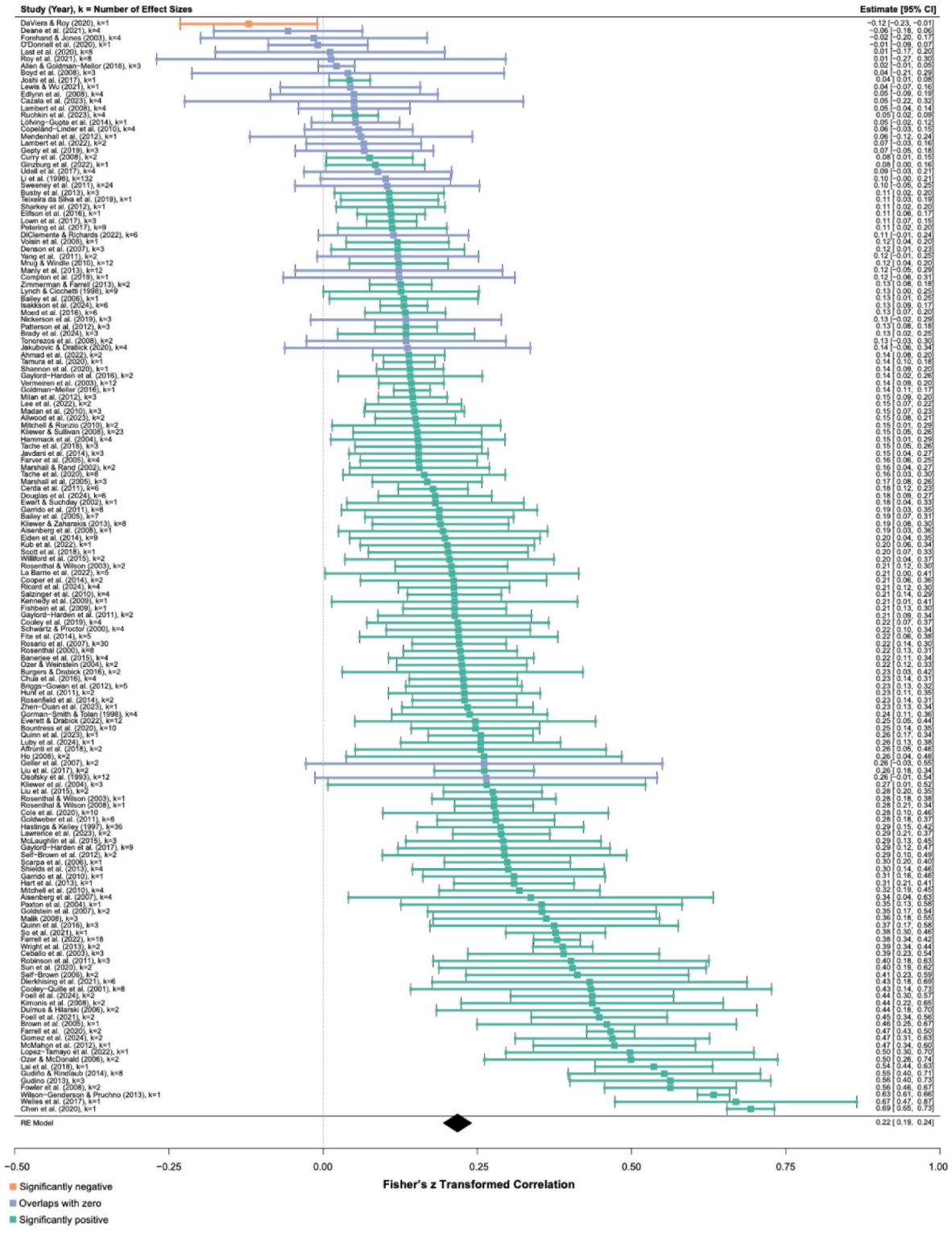

Fig. 5. Forest plot of study-level aggregated effect sizes for the association between community violence exposure and mental health outcomes

Note. Each point represents the mean effect size for a single article, with horizontal lines indicating 95% confidence intervals. Effect sizes were aggregated at the study-level (155 studies; k = 769 effect sizes total) to improve readability. Points are colored by significance: orange for significantly negative effects, green for significantly positive effects, and blue when the confidence interval overlaps zero (not significant). (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

moderated the association between community violence exposure and mental health outcomes, such that higher spending weakened the positive association with general stress ($\beta = -0.04$, $p = .04$) but strengthened the positive association with somatic symptoms ($\beta = 0.11$, $p = .02$). No statistically significant moderating effects were observed for externalizing, suicide, or substance use outcomes. These findings suggest that specific types of social service expenditures may differentially moderate the relationship between community violence exposure and distinct

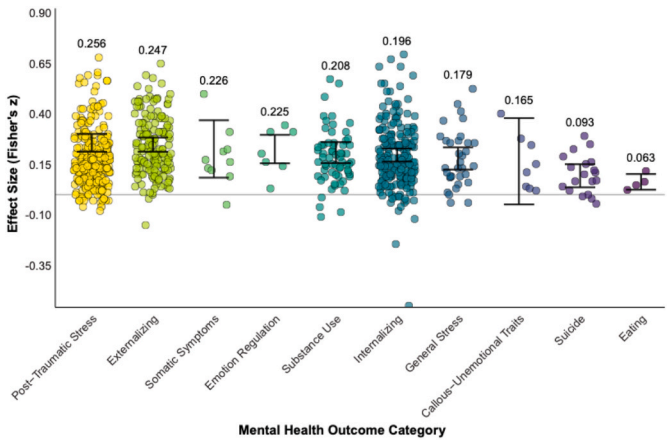

Fig. 6. Meta-analytic associations between community violence exposure and mental health outcomes

Note. Each category displays the pooled effect size in Fisher's z, with black bars indicating 95% confidence intervals. Categories are ordered from largest to smallest pooled effect size. Individual effect sizes are shown as dots (jittered for visibility). The Psychosis and Other categories are not displayed because they contained only one and two effect sizes, respectively.

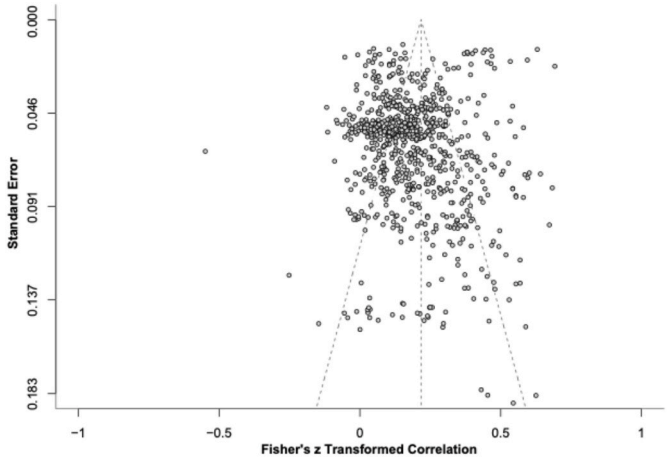

Fig. 7. Funnel plot of effect sizes for the association between community violence exposure and mental health outcomes

Note: Each circle represents an effect size (k = 769). The vertical dashed line indicates the pooled effect size, and the diagonal lines indicate pseudo-95% confidence limits. Points are jittered along both axes to enhance the visibility of overlapping effect sizes.

mental health outcomes.

3.6. Sensitivity analyses

3.6.1. Robustness of results to highly contributory studies

To test whether any single study disproportionately influenced the results, we conducted a sensitivity analysis excluding studies that contributed more than 5% of the total effect sizes. This led to the removal of one study that accounted for 17.2% of the effect sizes, reducing the number of effect sizes from 769 to 637. The positive association between community violence exposure and mental health outcomes remained virtually unchanged. In the sensitivity model, the average effect size was Fisher's z = 0.218 (95% CI [0.196, 0.240]; z = 19.64, $p < .001$), compared to Fisher's z = 0.217 (95% CI [0.195, 0.239]; z = 19.60, $p < .001$) in the full dataset. Heterogeneity remained high and statistically significant (sensitivity: Q(df = 636) = 8733.67, $p < .0001$; full model: Q(df = 768) = 9524.44, $p < .0001$). The negligible difference in effect size (Δz = 0.001) indicates that no single study unduly influenced the overall findings, supporting the robustness of the observed positive association between community violence and mental health problems.

3.6.2. Direct vs. indirect community violence exposure

We examined whether direct victimization vs. indirect witnessing or hearing about community violence moderated associations with mental health outcomes. Separate three-level random-effects models indicated that both direct (Fisher's z = 0.210, 95% CI [0.18, 0.24], $p < .001$; k = 203 from 46 studies) and indirect community violence exposure (Fisher's z = 0.209, 95% CI [0.16, 0.25], $p < .001$; k = 285 from 65 studies) were positively associated with mental health problems. A categorical moderator analysis (QM(1) = 0.03, $p = .87$) revealed no significant difference between community violence exposure types, indicating that direct and indirect experiences of community violence exposure were similarly associated with mental health problems.

3.6.3. Administrative vs. self-report community violence exposure

We assessed whether the use of administrative vs. self-report community violence exposure moderated the association with mental health outcomes. Separate three-level random-effects models indicated that both administrative records (Fisher's z = 0.143, 95% CI [0.065, 0.221], $p < .001$; k = 53 effect sizes from 18 studies) and self-report measures (Fisher's z = 0.225, 95% CI [0.203, 0.247], $p < .001$; k = 716 effect sizes from 138 studies) were positively associated with mental health outcomes. A categorical moderator analysis indicated a significant difference between administrative records and self-report measures of community violence exposure (QM(df = 1) = 7.52, $p = .006$), suggesting that the positive association between community violence exposure and mental health is amplified when assessed via self-report compared to administrative records.

3.6.4. Age group

Of the total 769 effect sizes that were included in the analysis, 537 were drawn from youth samples (≤17 years), 71 from adult samples (≥18 years), and 151 from mixed samples that included both youth and adults. For 10 effect sizes, insufficient information was available to determine the age composition of the sample. To examine whether associations varied by developmental stage, we fit separate random-effects models for each age group. Each subgroup model indicated a significant positive association between community violence exposure and mental health problems: youth (Fisher's z = 0.214, 95% CI [0.184, 0.244], $p < .001$), mixed-age (Fisher's z = 0.244, 95% CI [0.200, 0.287], $p < .001$), and adult (Fisher's z = 0.197, 95% CI [0.158, 0.236], $p < .001$). A categorical moderator analysis comparing age groups did not reveal significant differences, QM(2) = 2.39, $p = .303$, indicating that the strength of the positive association between community violence exposure and mental health did not vary as a function of the sample age.

3.6.5. Controlling for state wealth

We conducted sensitivity analyses controlling for state-level wealth (GDP). The overall pattern of findings was largely consistent, although several effects were attenuated. Higher hospital spending continued to significantly moderate the association between community violence exposure and somatic symptoms, such that higher spending was associated with a weaker association (β = −0.11, $p = .03$). Employment security spending continued to significantly moderate the association between community violence exposure and internalizing symptoms, such that higher spending was associated with a stronger positive association (β = 0.04, $p = .003$). Health spending continued to significantly moderate the association between community violence exposure and internalizing symptoms, such that higher spending was associated with a stronger positive association (β = 0.04, $p = .008$). In contrast, veterans' services spending was no longer a significant moderator of the

association between community violence exposure and post-traumatic stress ($\beta = -0.02$, $p = .233$); and employment security also no longer significantly moderated the association between community violence exposure and somatic symptoms ($\beta = -0.13$, $p = .147$). Public welfare spending no longer significantly moderated the associations between community violence exposure and general stress and somatic symptoms, although estimates remained near conventional thresholds after controlling for state-level wealth (general stress: $\beta = -0.05$, $p = .05$; somatic symptoms: $\beta = 0.14$, $p = .078$). All estimates remained in the same direction after controlling for state-level wealth (Supplemental Fig. 1).

4. Discussion

Community violence exposure is linked to many adverse mental health outcomes. The present study sought to build on prior work (Fowler et al., 2009; Wilson and Rosenthal, 2003) by providing an updated synthesis of research on community violence and mental health. We also sought to test whether state-level social service expenditures moderated the association between community violence exposure and mental health outcomes. Using a spatial meta-analytic approach that integrated findings from 155 studies across 23 states with Census expenditure data, the present study was able to assess both the associations between community violence and mental health outcomes and the broader structural conditions that may shape these associations.

We observed small-to-medium positive effect sizes in our analysis, consistent with findings from prior meta-analyses which also have reported modest positive associations between community violence exposure and mental health outcomes (Fowler et al., 2009; Wilson and Rosenthal, 2003). Although consistent across studies, the overall magnitude of these effects remains relatively modest. One reason for the modest effect size between community violence exposure and mental health outcomes may be due to the complexity and heterogeneity of community violence exposure. Community violence exposure encompasses multiple distinct characteristics, including type, severity, proximity, and chronicity of violence exposure, that interact to produce varied psychological outcomes (Kennedy and Ceballo, 2014). As one example, one study found that victimization and knowing the perpetrator of community violence were associated with higher levels of depression, witnessing community violence was associated with increased aggression, and knowing the perpetrator was associated with greater attention problems (Elsaesser, 2018). Yet relatively few studies move beyond broader categories to examine specific experiences of community violence. One exception is Li and colleagues (1998) who disaggregated community violence experiences, such as being beaten, threatened with rape, witnessing shootings, or seeing someone killed, and then tested the association with distinct domains of post-traumatic stress symptoms. They found that intrusive thoughts, distraction, and lack of belongingness were consistently associated with certain victimization and witnessing events, whereas hypervigilance and emotional numbing showed weaker or inconsistent associations (Li et al., 1998). Moving beyond broad categories and examining how specific types of community violence exposure are associated with mental health outcomes may be necessary to clarify the particular ways community violence exposure affects mental health.

Modest effect sizes also may reflect the dynamics of chronic exposure to community violence. Over time, repeated community violence exposure can foster adaptive coping strategies that may change how symptoms appear. For example, individuals may become desensitized, blunting emotional responses through affective numbing and reducing the visibility of distress even when it persists (Gaylord-Harden et al., 2017; Kennedy and Ceballo, 2016; McCart et al., 2007). Community violence may also become normalized, viewed as a routine feature of daily life that no longer provokes strong psychological reactions (Gaylord-Harden et al., 2017; Guerra et al., 2003; Ng-Mak et al., 2004). Chronic exposure can also alter the body's stress-response systems, disrupting typical patterns of physiological reactivity to threat and potentially altering vulnerability to mental health problems (Gresham et al., 2025). At the same time, not all individuals experience lasting harm following community violence exposure. Some demonstrate resilience, even in the face of severe or chronic adversity, which may contribute to the overall muted average effect size and variability across studies (Bonanno and Diminich, 2013; Masten et al., 1990). Together, these adaptations may attenuate observed community violence-mental health associations, helping to explain why even disaggregated effect sizes remain modest. Future research should examine how adaptive processes shape the impact of community violence on mental health.

Beyond the overall associations between community violence and mental health, we also examined whether state-level social service expenditures moderated these relationships. Our findings align with prior evidence indicating the impact of social service expenditures can vary by both spending category and outcome (i.e., community violence, mental health) (Apel, 2025; Park et al., 2020). On the one hand, several types of social service expenditures weakened the positive association between community violence exposure and mental health problems. Hospital spending weakened the positive association between community violence exposure and somatic symptoms, suggesting that investment in hospital infrastructure and services may lessen the extent to which violence manifests as somatic complaints, potentially by facilitating earlier identification and treatment (Akinleye et al., 2019; Baker et al., 2000). Public welfare spending weakened the positive association between community violence exposure and general stress, consistent with prior work showing that social safety net programs can reduce psychological distress by alleviating material hardship and financial strain (Oddo and Mabli, 2015). Veterans' services spending also had protective effects, weakening the positive association with post-traumatic stress symptoms, which is consistent with the idea that specialized services tailored to trauma-exposed populations can be protective (Apaydin et al., 2023). Employment security spending, one of the strongest protective effects, weakened the positive association with somatic symptoms potentially by increasing access to health insurance and preventive care (Hoffman and Paradise, 2008). Such findings encourage continued investigation into how targeted structural economic investments can be leveraged to mitigate the mental health consequences of community violence and inform policies that maximize protective benefits.

On the other hand, some expenditures amplified the positive associations between community violence exposure and mental health problems. Employment security spending amplified the positive association between community violence and internalizing outcomes, perhaps because greater job security increases workforce participation in settings that introduce new stressors, exacerbating anxiety or depression in already stressful contexts of community violence (Ray et al., 2017), or alternatively because greater employment security often comes with improved health benefits, which may increase the likelihood that mental health symptoms are detected. Greater health spending similarly amplified the positive association between community violence and internalizing outcomes, which may reflect increased identification of symptoms in healthcare settings rather than actual increases in severity, as expanded resources for healthcare can increase routine screening for depression and anxiety, raising the likelihood that internalizing symptoms are identified and documented (Pignone et al., 2002). Public welfare spending strengthened the positive association between community violence exposure and somatic symptoms. This may reflect the compounding effect of stressors faced by individuals navigating both community violence and welfare participation, where the administrative burdens, stigma, and discrimination associated with welfare receipt (Hertel-Fernandez, 2024; Lapham and Martinson, 2022; Suh et al., 2025) may overwhelm coping resources and amplify physical symptoms such as pain and fatigue beyond what violence exposure alone would produce (Loeb et al., 2018). Alternatively, public welfare spending may be a proxy for broader structural disadvantage at the community level, where higher welfare utilization co-occurs with vulnerabilities such as housing instability, food insecurity, and limited

healthcare access that independently elevate somatic symptom burden and compound the physiological effects of violence exposure (Berg et al., 2022; Dore et al., 2025; Kline et al., 2023; Loeb et al., 2018; Shahidi et al., 2019). Thus, rather than a uniform buffering effect, different types of spending appear to shape the detection or manifestation of mental health outcomes in differential (and sometimes counterintuitive) ways. Further research should clarify how social service investments may have unintended consequences and ways they can be improved so that policymakers can deploy resources most effectively.

Before concluding, a number of limitations should be noted when interpreting these findings. First, although we identified a significant positive overall association between community violence exposure and mental health outcomes, the overrepresentation of certain states may limit the generalizability of findings. Although our dataset spanned 23 states, the majority of studies were conducted in a handful of states (i.e., Illinois, New York, California, and Maryland). Future research should aim to expand geographic coverage, including additional states and other geographic contexts (e.g., rural), to better capture the diversity of community violence experiences across the United States. Second, this study was unable to disentangle state expenditures from individual utilization of social services. While examining spending at the state level is important for understanding how structural policy contexts may shape the community violence-mental health association, future research is needed to determine whether and how direct social service utilization, in combination with state spending levels, affects the strength and pattern of associations between community violence exposure and mental health. Third, state-level social service expenditures were matched to the publication year of each article due to the absence of reported data collection years for approximately half of the included studies, a common challenge in spatial meta-analyses (Johnson et al., 2017). Publication year is an imperfect proxy for study timing and may introduce temporal misalignment in some cases, underscoring the need for future work with more precise alignment between violence exposure, outcome, and state spending data. Fourth, although the present study focuses on state-level social service expenditures, we acknowledge a growing body of research examining local and municipal social services spending decisions, which are often more proximal to residents' daily experiences and may shape violence and health outcomes in distinct ways (Beck, 2025; Gottlieb et al., 2025). Local-level spending may therefore affect people differently than spending decisions made at the state level, and future studies could directly connect city-level spending data to individuals' experiences of violence and mental health. Fifth, the moderating effects of state-level social service spending were statistically significant but small in magnitude. Although these effects may appear trivial, economists and policy scholars note that even small changes can matter when applied across large populations, particularly if the intervention is scalable (Carey et al., 2023; Masters et al., 2017; Matthay et al., 2021). That said, our study does not test whether these moderation effects translate into measurable population-level gains. Instead, our findings show that the strength of the association between community violence exposure and mental health differs across structural contexts. Future research, including formal economic evaluation, is needed to determine whether variation in the violence-mental health association across spending contexts produces meaningful population-level benefits and to better understand the mechanisms through which social service investments may buffer (or, in some cases, exacerbate) the mental health consequences of community violence. Lastly, many categories of social service spending (e.g., public welfare) showed no significant moderating effect on the positive associations between community violence exposure and mental health outcomes. While our analyses cannot determine why these expenditures did not exert measurable influence, one possibility is that investments may not translate into benefits if violence-affected communities cannot or do not access services. Historical and ongoing structural racism, exclusion, unequal treatment, and bias within social service systems may contribute to distrust and potential underutilization (Archibald and Putnam Rankin, 2013; Bailey et al., 2017; Khazanchi et al., 2024; Lee et al., 2009; Small, 2006; Whaley, 2001; Yang et al., 2024). Future research should therefore investigate the factors that may limit the effectiveness of certain forms of social service investment on the association between community violence and mental health problems.

Community violence remains a pervasive and devastating experience for many individuals across the United States, with profound implications for mental health. By integrating evidence across 155 studies using a spatial meta-analytic framework, this study offers the most comprehensive examination to date of how community violence relates to a broad range of mental health outcomes, illuminating the complex relationships among community violence exposure, mental health, and social service investments. While this study represents an initial step, the results underscore the need for cross-disciplinary research that integrates insights from psychology, public health, and economics to clarify how and why social service expenditures differentially moderate mental health outcomes among those exposed to community violence. Such efforts are essential to ensure that public dollars are deployed in ways that maximize their protective value, generate meaningful population-level health benefits, and address the inequities faced by communities most affected by violence.

Ethics approval

This study is a meta-analysis of previously published research and did not involve the collection of primary data from human participants. All included studies were conducted in accordance with relevant ethical standards as reported in the original publications. Therefore, institutional review board approval was not required.

CRediT authorship contribution statement

Jordyn R. Ricard: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Software, Visualization, Writing – original draft, Writing – review & editing. **Jennifer A. Richeson:** Conceptualization, Supervision, Writing – review & editing. **Mudia Uzzi:** Conceptualization, Supervision, Writing – review & editing. **Mikayla Barber:** Data curation, Investigation, Writing – review & editing. **Madelynn Huff:** Data curation, Investigation, Writing – review & editing. **Matt Larosa:** Data curation, Validation. **Natasha Steinert:** Data curation, Investigation, Writing – review & editing. **Arielle Baskin-Sommers:** Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Writing – original draft, Writing – review & editing.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2026.119372.

Data availability

Data will be made available on request.

References

Ahmad, S.I., Rudd, K.L., LeWinn, K.Z., Mason, W.A., Murphy, L., Juarez, P.D., Karr, C.J., Sathyanarayana, S., Tylavsky, F.A., Bush, N.R., 2022. Maternal childhood trauma and prenatal stressors are associated with child behavioral health. Journal of Developmental Origins of Health and Disease 13 (4), 483–493. https://doi.org/10.1017/S2040174421000581.

Akinleye, D.D., McNutt, L.-A., Lazariu, V., McLaughlin, C.C., 2019. Correlation between hospital finances and quality and safety of patient care. PLoS One 14 (8), e0219124. https://doi.org/10.1371/journal.pone.0219124.

Apaydin, E.A., Paige, N.M., Begashaw, M.M., Larkin, J., Miake-Lye, I.M., Shekelle, P.G., 2023. Veterans health administration (VA) vs. Non-VA healthcare quality: a

systematic review. J. Gen. Intern. Med. 38 (9), 2179–2188. https://doi.org/10.1007/s11606-023-08207-2.
Apel, R., 2025. Can Social Safety Net Spending Prevent Crime?.
Archibald, M.E., Putnam Rankin, C., 2013. A spatial analysis of community disadvantage and access to healthcare services in the U.S. Soc. Sci. Med. 90, 11–23. https://doi.org/10.1016/j.socscimed.2013.04.023.
Armstead, T.L., Wilkins, N., Nation, M., 2021. Structural and social determinants of inequities in violence risk: a review of indicators. J. Community Psychol. 49 (4), 878–906. https://doi.org/10.1002/jcop.22232.
Baiden, P., Hall, A.J., LaBrenz, C.A., Awua, J., Glikpo, R.M., Nartey, P., 2026. Exposure to neighborhood violence and substance use among adolescents: findings from a population-based study. J. Affect. Disord. 394, 120626. https://doi.org/10.1016/j.jad.2025.120626.
Bailey, Z.D., Krieger, N., Agénor, M., Graves, J., Linos, N., Bassett, M.T., 2017. Structural racism and health inequities in the USA: evidence and interventions. Lancet 389 (10077), 1453–1463. https://doi.org/10.1016/S0140-6736(17)30569-X.
Baker, D.W., Shapiro, M.F., Schur, C.L., 2000. Health insurance and access to care for symptomatic conditions. Arch. Intern. Med. 160 (9), 1269–1274. https://doi.org/10.1001/archinte.160.9.1269.
Beck, B., 2025. Local government spending: policing versus social services. Annual Review of Criminology 8 (1), 505–528. https://doi.org/10.1146/annurev-criminol-111523-122639.
Berg, N., Nummi, T., Bean, C.G., Westerlund, H., Virtanen, P., Hammarström, A., 2022. Risk factors in adolescence as predictors of trajectories of somatic symptoms over 27 years. Eur. J. Publ. Health 32 (5), 696–702. https://doi.org/10.1093/eurpub/ckac081.
Bonanno, G.A., Diminich, E.D., 2013. Annual Research Review: positive adjustment to adversity – trajectories of minimal–impact resilience and emergent resilience. JCPP (J. Child Psychol. Psychiatry) 54 (4), 378–401. https://doi.org/10.1111/jcpp.12021.
Borenstein, M. (Ed.), 2009. Introduction to meta-analysis. John Wiley & Sons.
Borenstein, M., Hedges, L.V., Higgins, J.P.T., Rothstein, H.R., 2010. A basic introduction to fixed-effect and random-effects models for meta-analysis. Res. Synth. Methods 1 (2), 97–111. https://doi.org/10.1002/jrsm.12.
Brady, R.G., Leverett, S.D., Mueller, L., Ruscitti, M., Latham, A.R., Smyser, T.A., Gerstein, E.D., Warner, B.B., Barch, D.M., Luby, J.L., Rogers, C.E., Smyser, C.D., 2024. Neighborhood crime and externalizing behavior in toddlers: a longitudinal Study with neonatal fMRI and parenting. J. Am. Acad. Child Adolesc. Psychiatr. 63 (7), 733–744. https://doi.org/10.1016/j.jaac.2023.09.547.
Bronfenbrenner, U., 2000. Ecological systems theory. Encyclopedia of Psychology 3, 129–133. https://doi.org/10.1037/10518-046. American Psychological Association.
Bronfenbrenner, U., Morris, P.A., 2007. The bioecological model of human development. In: Handbook of Child Psychology. John Wiley & Sons, Ltd. https://doi.org/10.1002/9780470147658.chpsy0114.
Buggs, S.A.L., Kravitz-Wirtz, N.D., Lund, J.J., 2022. Social and structural determinants of community firearm violence and community trauma. Ann. Am. Acad. Polit. Soc. Sci. 704 (1), 224–241. https://doi.org/10.1177/00027162231173324.
Calderoni, M.E., Alderman, E.M., Silver, E.J., Bauman, L.J., 2006. The mental health impact of 9/11 on inner-city high school students 20 miles north of ground zero. J. Adolesc. Health : Official Publication of the Society for Adolescent Medicine 39 (1), 57–65. https://doi.org/10.1016/j.jadohealth.2005.08.012.
Carey, E.G., Ridler, I., Ford, T.J., Stringaris, A., 2023. Editorial perspective: when is a 'small effect' actually large and impactful? JCPP (J. Child Psychol. Psychiatry) 64 (11), 1643–1647. https://doi.org/10.1111/jcpp.13817.
Castellví, P., Miranda-Mendizábal, A., Parés-Badell, O., Almenara, J., Alonso, I., Blasco, M.J., Cebrià, A., Gabilondo, A., Gili, M., Lagares, C., Piqueras, J.A., Roca, M., Rodríguez-Marín, J., Rodríguez-Jimenez, T., Soto-Sanz, V., Alonso, J., 2017. Exposure to violence, a risk for suicide in youths and young adults. A meta-analysis of longitudinal studies. Acta Psychiatr. Scand. 135 (3), 195–211. https://doi.org/10.1111/acps.12679.
Chen, E., Miller, G.E., 2013. Socioeconomic status and health: mediating and moderating factors. Annu. Rev. Clin. Psychol. 9 (1), 723–749. https://doi.org/10.1146/annurev-clinpsy-050212-185634.
Chinn, S., 2000. A simple method for converting an odds ratio to effect size for use in meta-analysis. Stat. Med. 19 (22), 3127–3131. https://doi.org/10.1002/1097-0258(20001130)19:22%253C3127::AID-SIM784%253E3.0.CO;2-M.
Church, J.D., 2016. Comparing the consumer price index with the gross domestic product price index and gross domestic product implicit price deflator. Bureau of Labor Statistics. https://doi.org/10.21916/mlr.2016.13.
Colson, K.E., Galin, J., Ahern, J., 2016. Spatial proximity to incidents of community violence is associated with fewer suicides in urban California. J. Urban Health : Bull. N. Y. Acad. Med. 93 (5), 770–796. https://doi.org/10.1007/s11524-016-0072-7.
Cooley-Strickland, M., Quille, T.J., Griffin, R.S., Stuart, E.A., Bradshaw, C.P., Furr-Holden, D., 2009. Community violence and youth: affect, behavior, substance use, and academics. Clin. Child Fam. Psychol. Rev. 12 (2), 127–156. https://doi.org/10.1007/s10567-009-0051-6.
Cozza, S.J., Lerner, R.M., Haskins, R., 2014. Military and veteran families and children: policies and programs for health maintenance and positive development and commentaries. Soc. Pol. Rep. 28 (3), 1–30. https://doi.org/10.1002/j.2379-3988.2014.tb00080.x.
Crum, K.I., Cornacchio, D., Coxe, S., Green, J.G., Comer, J.S., 2018. A latent profile analysis of co-occurring youth posttraumatic stress and conduct problems following community trauma. J. Child Fam. Stud. 27 (11), 3638–3649. https://doi.org/10.1007/s10826-018-1205-2.
DaViera, A.L., Roy, A.L., 2020. Chicago youths' exposure to community violence: contextualizing spatial dynamics of violence and the relationship with psychological functioning. Am. J. Community Psychol. 65 (3–4), 332–342. https://doi.org/10.1002/ajcp.12405.
Davis, R.A., 2011. Investing in prevention. In: Social and Economic Costs of Violence: Workshop Summary. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK190007/.
De Los Reyes, A., Kazdin, A.E., 2005. Informant discrepancies in the assessment of childhood psychopathology: a critical review, theoretical framework, and recommendations for further study. Psychol. Bull. 131 (4), 483–509. https://doi.org/10.1037/0033-2909.131.4.483.
DeCou, C.R., Lynch, S.M., 2017. Assessing adult exposure to community violence: a review of definitions and measures. Trauma Violence Abuse 18 (1), 51–61. https://doi.org/10.1177/1524838015590590.
DiGrande, L., Perrin, M.A., Thorpe, L.E., Thalji, L., Murphy, J., Wu, D., Farfel, M., Brackbill, R.M., 2008. Posttraumatic stress symptoms, PTSD, and risk factors among lower Manhattan residents 2–3 years after the September 11, 2001 terrorist attacks. J. Trauma Stress 21 (3), 264–273. https://doi.org/10.1002/jts.20345.
Dore, E.C., Hamad, R., Komro, K.A., Livingston, M.D., 2025. The long-term health effects of welfare reform. Soc. Sci. Med. 371, 117878. https://doi.org/10.1016/j.socscimed.2025.117878.
Egger, M., Smith, G.D., Schneider, M., Minder, C., 1997. Bias in meta-analysis detected by a simple, graphical test. Br. Med. J. 315 (7109), 629–634. https://doi.org/10.1136/bmj.315.7109.629.
Elsaesser, C., 2018. The longitudinal relations between dimensions of community violence exposure and developmental outcomes among adolescent ethnic minority males. Psychology of Violence 8 (4), 409–417. https://doi.org/10.1037/vio0000140.
Fernández-Castilla, B., Declercq, L., Jamshidi, L., Beretvas, S.N., Onghena, P., Van Den Noortgate, W., 2021. Detecting selection bias in meta-analyses with multiple outcomes: a simulation Study. J. Exp. Educ. 89 (1), 125–144. https://doi.org/10.1080/00220973.2019.1582470.
Finkelhor, D., 2020. Trends in adverse childhood experiences (ACEs) in the United States. Child Abuse Neglect 108, 104641. https://doi.org/10.1016/j.chiabu.2020.104641.
Finkelhor, D., Turner, H., Ormrod, R., Hamby, S.L., 2010. Trends in childhood violence and abuse exposure: evidence from 2 national surveys. Arch. Pediatr. Adolesc. Med. 164 (3), 238–242. https://doi.org/10.1001/archpediatrics.2009.283.
Finkelhor, D., Turner, H.A., Shattuck, A., Hamby, S.L., 2015. Prevalence of childhood exposure to violence, crime, and abuse: results from the National Survey of children's exposure to violence. JAMA Pediatr. 169 (8), 746. https://doi.org/10.1001/jamapediatrics.2015.0676.
Fowler, P.J., Tompsett, C.J., Braciszewski, J.M., Jacques-Tiura, A.J., Baltes, B.B., 2009. Community violence: a meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. Dev. Psychopathol. 21 (1), 227–259. https://doi.org/10.1017/S0954579409000145.
Frazer, E., Mitchell, R.A., Nesbitt, L.S., Williams, M., Mitchell, E.P., Williams, R.A., Browne, D., 2018. The violence epidemic in the African American community: a call by the National Medical Association for comprehensive reform. J. Natl. Med. Assoc. 110 (1), 4–15. https://doi.org/10.1016/j.jnma.2017.08.009.
Gard, A.M., Brooks-Gunn, J., McLanahan, S.S., Mitchell, C., Monk, C.S., Hyde, L.W., 2022. Deadly gun violence, neighborhood collective efficacy, and adolescent neurobehavioral outcomes. PNAS Nexus 1 (3), pgac061. https://doi.org/10.1093/pnasnexus/pgac061.
Gaylord-Harden, N.K., So, S., Bai, G.J., Tolan, P.H., 2017. Examining the effects of emotional and cognitive desensitization to community violence exposure in male adolescents of color. Am. J. Orthopsychiatry 87 (4), 463–473. https://doi.org/10.1037/ort0000241.
Ginzburg, S.L., Lemon, S.C., Rosal, M., 2022. Neighborhood characteristics and ataque de nervios: the role of neighborhood violence. Transcult. Psychiatry 59 (4), 438–447. https://doi.org/10.1177/1363461520935674.
Gottlieb, A., DiMonte, C., Bocanegra, K., Hong, Y.S., Peck-Block, A.R., 2025. Local government spending tradeoffs in the Great Lakes Region: criminal legal spending, community investments, and violent death. Soc. Sci. Med. 382, 118280. https://doi.org/10.1016/j.socscimed.2025.118280.
Gresham, B., Morency, M.M., Corcoran, F., Kunkel, J.J., Riegelman, A., 2025. Exposure to community violence and biomarkers of allostatic load: a systematic review and meta-analysis. Psychol. Bull. https://doi.org/10.1037/bul0000488.
Grinshteyn, E., Hemenway, D., 2016. Violent death rates: the US compared with other high-income OECD countries, 2010. Am. J. Med. 129 (3), 266–273. https://doi.org/10.1016/j.amjmed.2015.10.025.
Guerra, N.G., Rowell Huesmann, L., Spindler, A., 2003. Community violence exposure, social cognition, and aggression among urban elementary school children. Child Dev. 74 (5), 1561–1576. https://doi.org/10.1111/1467-8624.00623.
Hertel-Fernandez, A., 2024. Measuring psychological burden in the supplemental nutrition assistance Program: inequalities across applicants in stress and disrespect. Soc. Serv. Rev. 98 (4), 624–663. https://doi.org/10.1086/732895.
Hoffman, C., Paradise, J., 2008. Health insurance and access to health care in the United States. Ann. N. Y. Acad. Sci. 1136 (1), 149–160. https://doi.org/10.1196/annals.1425.007.
Hunter, J.E., Schmidt, F.L., 2004. Methods of Meta-Analysis: Correcting Error and Bias in Research Findings. SAGE.
Isaksson, M., Isaksson, J., Schwab-Stone, M., Ruchkin, V., 2024. Longitudinal associations between community violence exposure, posttraumatic stress symptoms, and eating disorder symptoms. J. Eat. Disord. 12 (1), 6. https://doi.org/10.1186/s40337-024-00965-6.

Jacoby, A., 2018. Social service organizations, discretionary funding, and neighborhood crime rates. Crime Delinquen. 64 (9), 1193–1214. https://doi.org/10.1177/0011128716688884.
Johnson, B.T., Cromley, E.K., Marrouch, N., 2017. Spatiotemporal meta-analysis: reviewing health psychology phenomena over space and time. Health Psychol. Rev. 11 (3), 280–291. https://doi.org/10.1080/17437199.2017.1343679.
Johnson, B.T., Sisti, A., Bernstein, M., Chen, K., Hennessy, E.A., Acabchuk, R.L., Matos, M., 2021. Community-level factors and incidence of gun violence in the United States, 2014–2017. Soc. Sci. Med. 280, 113969. https://doi.org/10.1016/j.socscimed.2021.113969.
Joshi, S., Mooney, S.J., Rundle, A.G., Quinn, J.W., Beard, J.R., Cerdá, M., 2017. Pathways from neighborhood poverty to depression among older adults. Health Place 43, 138–143. https://doi.org/10.1016/j.healthplace.2016.12.003.
Kennedy, T.M., Ceballo, R., 2014. Who, what, when, and where? Toward a dimensional conceptualization of community violence exposure. Rev. Gen. Psychol. 18 (2), 69–81. https://doi.org/10.1037/gpr0000005.
Kennedy, T.M., Ceballo, R., 2016. Emotionally numb: desensitization to community violence exposure among urban youth. Dev. Psychol. 52 (5), 778–789. https://doi.org/10.1037/dev0000112.
Khazanchi, R., South, E.C., Cabrera, K.I., Winkelman, T.N.A., Vasan, A., 2024. Health care access and use among U.S. children exposed to neighborhood violence. Am. J. Prev. Med. https://doi.org/10.1016/j.amepre.2024.01.009. S0749379724000230.
Kirk, D.S., Hardy, M., 2014. The acute and enduring consequences of exposure to violence on youth mental health and aggression. Justice Q. 31, 539.
Kliewer, W., Zaharakis, N., 2013. Community violence exposure, coping, and problematic alcohol and drug use among urban, female caregivers: a prospective study. Pers. Indiv. Differ. 55 (4), 361–366. https://doi.org/10.1016/j.paid.2013.03.020.
Kline, C.L., Shamshair, S., Kullgren, K.A., Leber, S.M., Malas, N., 2023. A review of the impact of sociodemographic factors on the assessment and management of pediatric somatic symptom and related disorders. Journal of the Academy of Consultation-Liaison Psychiatry 64 (1), 58–64. https://doi.org/10.1016/j.jaclp.2022.10.266.
Lambert, S.F., Bradshaw, C., Cammack, N., Ialongo, N., 2011. Examining the developmental process of risk for exposure to community violence among urban youth. J. Prev. Interv. Community 39 (2), 98–113. https://doi.org/10.1080/10852352.2011.556558.
Lambert, S.F., Copeland-Linder, N., Ialongo, N.S., 2008. Longitudinal associations between community violence exposure and suicidality. J. Adolesc. Health 43 (4), 380–386. https://doi.org/10.1016/j.jadohealth.2008.02.015.
Lapham, J., Martinson, M.L., 2022. The intersection of welfare stigma, state contexts and health among mothers receiving public assistance benefits. SSM Popul. Health 18, 101117. https://doi.org/10.1016/j.ssmph.2022.101117.
Lee, C., Ayers, S.L., Kronenfeld, J.J., 2009. The Association between perceived provider discrimination, health care utilization, and health status in racial and ethnic minorities. Ethn. Dis. 19 (3), 330–337.
Li, X., Howard, D., Stanton, B., Rachuba, L., Cross, S., 1998. Distress symptoms among urban African American children and adolescents: a psychometric evaluation of the checklist of children's distress symptoms. Arch. Pediatr. Adolesc. Med. 152 (6). https://doi.org/10.1001/archpedi.152.6.569.
Loeb, T.B., Joseph, N.T., Wyatt, G.E., Zhang, M., Chin, D., Thames, A., Aswad, Y., 2018. Predictors of somatic symptom severity: the role of cumulative history of trauma and adversity in a diverse community sample. Psychol. Trauma, Theory Res. Pract. Pol. 10 (5), 491–498. https://doi.org/10.1037/tra0000334.
Lynch, M., 2003. Consequences of children's exposure to community violence. Clin. Child Fam. Psychol. Rev. 6 (4), 265–274. https://doi.org/10.1023/b:ccfp.0000006293.77143.e1.
Margolin, G., Gordis, E.B., 2000. The effects of family and community violence on children. Annu. Rev. Psychol. 51, 445–479. https://doi.org/10.1146/annurev.psych.51.1.445.
Masten, A.S., Best, K.M., Garmezy, N., 1990. Resilience and development: contributions from the study of children who overcome adversity. Dev. Psychopathol. 2 (4), 425–444. https://doi.org/10.1017/S0954579400005812.
Masters, R., Anwar, E., Collins, B., Cookson, R., Capewell, S., 2017. Return on investment of public health interventions: a systematic review. J. Epidemiol. Community 71 (8), 827–834. https://doi.org/10.1136/jech-2016-208141.
Matthay, E.C., Hagan, E., Gottlieb, L.M., Tan, M.L., Vlahov, D., Adler, N., Glymour, M.M., 2021. Powering population health research: considerations for plausible and actionable effect sizes. SSM Popul. Health 14, 100789. https://doi.org/10.1016/j.ssmph.2021.100789.
McCart, M.R., Smith, D.W., Saunders, B.E., Kilpatrick, D.G., Resnick, H., Ruggiero, K.J., 2007. Do urban adolescents become desensitized to community violence? Data from a National Survey. Am. J. Orthopsychiatry 77 (3), 434–442. https://doi.org/10.1037/0002-9432.77.3.434.
Miliauskas, C.R., Faus, D.P., Da Cruz, V.L., Do Nascimento Vallaperde, J.G.R., Junger, W., Lopes, C.S., 2022. Community violence and internalizing mental health symptoms in adolescents: a systematic review. BMC Psychiatry 22 (1), 253. https://doi.org/10.1186/s12888-022-03873-8.
Ng-Mak, D.S., Salzinger, S., Feldman, R.S., Stueve, C.A., 2004. Pathologic adaptation to community violence among inner-city youth. Am. J. Orthopsychiatry 74 (2), 196–208. https://doi.org/10.1037/0002-9432.74.2.196.
O'Neill, K.M., Dodington, J., Gawel, M., Borrup, K., Shapiro, D.S., Gates, J., Gregg, S., Becher, R.D., 2023. The effect of the COVID-19 pandemic on community violence in Connecticut. Am. J. Surg. 225 (4), 775–780. https://doi.org/10.1016/j.amjsurg.2022.10.004.
Oddo, V.M., Mabli, J., 2015. Association of participation in the Supplemental Nutrition Assistance Program and psychological distress. Am. J. Publ. Health 105 (6), e30–e35. https://doi.org/10.2105/AJPH.2014.302480.
Palatucci, J.S., Monheit, A.C., 2022. The impact of increasing community-directed State mental health agency expenditures on violent crime. Community Ment. Health J. 58 (6), 1027–1037. https://doi.org/10.1007/s10597-021-00911-9.
Park, D.S., Han, J., Torabi, M., Forget, E.L., 2020. Managing mental health: why we need to redress the balance between healthcare spending and social spending. BMC Public Health 20 (1), 393. https://doi.org/10.1186/s12889-020-08491-1.
Peterson, R.A., Brown, S.P., 2005. On the use of beta coefficients in meta-analysis. J. Appl. Psychol. 90 (1), 175–181. https://doi.org/10.1037/0021-9010.90.1.175.
Pignone, M.P., Gaynes, B.N., Rushton, J.L., Burchell, C.M., Orleans, C.T., Mulrow, C.D., Lohr, K.N., 2002. Screening for Depression in adults: a Summary of the evidence for the U.S. preventive services task force. Ann. Intern. Med. 136 (10), 765–776. https://doi.org/10.7326/0003-4819-136-10-200205210-00013.
R Core Team, 2023. R: a language and environment for statistical computing. https://www.R-project.org/.
Ray, T.K., Kenigsberg, T.A., Pana-Cryan, R., 2017. Employment arrangement, job stress, and health-related quality of life. Saf. Sci. 100, 46–56. https://doi.org/10.1016/j.ssci.2017.05.003.
Rouhakhtar, P.J.R., Pitts, S.C., Schiffman, J., 2019. Associations between race, discrimination, community violence, traumatic life events, and psychosis-like experiences in a sample of college students. J. Clin. Med. 8 (10). https://doi.org/10.3390/jcm8101573.
Shahidi, F.V., Ramraj, C., Sod-Erdene, O., Hildebrand, V., Siddiqi, A., 2019. The impact of social assistance programs on population health: a systematic review of research in high-income countries. BMC Public Health 19 (1), 2. https://doi.org/10.1186/s12889-018-6337-1.
Sharkey, P.T., Tirado-Strayer, N., Papachristos, A.V., Raver, C.C., 2012. The effect of local violence on children's attention and impulse control. Am. J. Publ. Health 102 (12), 2287–2293. https://doi.org/10.2105/AJPH.2012.300789.
Sipsma, H.L., Canavan, M.E., Rogan, E., Taylor, L.A., Talbert-Slagle, K.M., Bradley, E.H., 2017. Spending on social and public health services and its association with homicide in the USA: an ecological study. BMJ Open 7 (10), e016379. https://doi.org/10.1136/bmjopen-2017-016379.
Small, M.L., 2006. Neighborhood institutions as resource brokers: Childcare centers, interorganizational ties, and resource access among the poor. Soc. Probl. 53 (2), 274–292. https://doi.org/10.1525/sp.2006.53.2.274.
Stein, B.D., Jaycox, L.H., Kataoka, S., Rhodes, H.J., Vestal, K.D., 2003. Prevalence of child and adolescent exposure to community violence. Clin. Child Fam. Psychol. Rev. 6 (4), 247–264. https://doi.org/10.1023/B:CCFP.0000006292.61072.d2.
Suh, H.N., Park, S., Hsu, L.-C., 2025. Somatic symptoms, perceived discrimination, and depressive symptoms across social class among Asian American college students: a moderated mediation model. Asian American Journal of Psychology 16 (2), 110–118. https://doi.org/10.1037/aap0000356.
Tache, R.M., Lambert, S.F., Ialongo, N.S., 2020. The role of depressive symptoms in substance use among African American boys exposed to community violence. J. Trauma Stress 33 (6), 1039–1047. https://doi.org/10.1002/jts.22566.
The White House, T.W., 2021. FACT SHEET: Biden-Harris Administration Announces Initial Actions to Address the Gun Violence Public Health Epidemic. The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/07/fact-sheet-biden-harris-administration-announces-initial-actions-to-address-the-gun-violence-public-health-epidemic/.
The White House, 2023. Office of Gun Violence Prevention. The White House. https://bidenwhitehouse.archives.gov/ogvp/.
Unnever, J.D., Stults, B.J., Messner, S.F., 2023. Structural racism and criminal violence: an analysis of state-level variation in homicide. Race and Justice 13 (4), 433–462. https://doi.org/10.1177/21533687211015287.
U.S. Bureau of Economic Analysis, 2025. State annual summary statistics: personal income, GDP, consumer spending, price indexes, and employment. https://apps.bea.gov/itable/?ReqID=70&step=1&_gl=1*1w921ta*_ga*MTQ2OTgyOTQ1MC4xNzcwNTYxNzgx*_ga_J4698JNNFT*czE3NzA1NjE3ODAkbzEkZzAkdDE3NzA1NjE3ODEkajU5JGwwJGgw#eyJhcHBpZCI6NzAsInN0ZXBzIjpbMSwyOSwyNSwzMSwyNiwyNywzMF0sImRhdGEiOltlIlRhYmxlSWQiLCI2MDAiXSxbIk1ham9yX0FyZWEiLCIwIl0sWyJTdGF0ZSIsWyIwIl1dLFsiQXJlYSIsWyJ.YWCJdXSxbIlN0YXRpc3RpYyIsWyItMSJdXSxbIlVuaXRfb2ZfbWVhc3VyZSIsIkxldmVscyJdLFsiWWVhciIsWyItMSJdXSxbIlllYXJCZWdpbiIsIi0xIl0sWyJZZWFyX0VuZCIsIi0xIl1dfQ==.
U.S. Bureau of Labor Statistics, 2022. Consumer Price Index for all Urban Consumers (CPI-U). U.S. Bureau of Labor Statistics. https://data.bls.gov/timeseries/CUUR0000SA0.
U.S. Census Bureau, 2025. Annual Survey of State and Local Government Finances. Census.Gov. https://www.census.gov/programs-surveys/gov-finances.html.
U.S. Department of Health and Human Services, 2024. *U.S. Surgeon General Issues Advisory on the Public Health Crisis of Firearm Violence in the United States* [News Release]. https://www.hhs.gov/about/news/2024/06/25/us-surgeon-general-issues-advisory-public-health-crisis-firearm-violence-united-states.html.
Uzzi, M., Whittaker, S., Esposito, M.H., Dean, L.T., Buggs, S.A., Pollack Porter, K.M., 2024. Racial capitalism and firearm violence: developing a theoretical framework for firearm violence research examining structural racism. Soc. Sci. Med. 358, 117255. https://doi.org/10.1016/j.socscimed.2024.117255.
Vermeiren, R., Schwab-Stone, M., Deboutte, D., Leckman, P.E., Ruchkin, V., 2003. Violence exposure and substance use in adolescents: findings from three countries. Pediatrics 111 (3), 535–540. https://doi.org/10.1542/peds.111.3.535.
Whaley, A.L., 2001. Cultural mistrust and mental health services for African Americans: a review and meta-analysis. Couns. Psychol. 29 (4), 513–531. https://doi.org/10.1177/0011000001294003.

Williams, D.R., Cooper, L.A., 2019. Reducing racial inequities in health: using what we already know to take action. Int. J. Environ. Res. Publ. Health 16 (4), 606. https://doi.org/10.3390/ijerph16040606.
Wilson, W.C., Rosenthal, B.S., 2003. The relationship between exposure to community violence and psychological distress among adolescents: a meta-analysis. Violence Vict. 18 (3), 335–352. https://doi.org/10.1891/vivi.2003.18.3.335.
Wright, A.W., Austin, M., Booth, C., Kliewer, W., 2016. Exposure to community violence and physical health outcomes in youth: a systematic review. J. Pediatr. Psychol. https://doi.org/10.1093/jpepsy/jsw088.
Yang, J.P., Gaska, K.A., Do, Q.A., Tung, E.L., Scott, S.B., 2024. Unfair racial treatment in healthcare, healthcare utilization, and health status among black, Indigenous, women of color. Journal of Prevention and Health Promotion, 26320770241248455. https://doi.org/10.1177/26320770241248455.
Zinzow, H.M., Ruggiero, K.J., Resnick, H., Hanson, R., Smith, D., Saunders, B., Kilpatrick, D., 2009. Prevalence and mental health correlates of witnessed parental and community violence in a national sample of adolescents. J. Child Psychol. Psychiatry Allied Discip. 50 (4), 441–450. https://doi.org/10.1111/j.1469-7610.2008.02004.x.

References contributing to meta-analytic data

Affrunti, N.W., Suárez, L., Simpson, D., 2018. Community violence and posttraumatic stress disorder symptoms in urban youth: the moderating influence of friend and parent support. J. Community Psychol. 46 (5), 636–650. https://doi.org/10.1002/jcop.21963.
Aisenberg, E., Ayón, C., Orozco-Figueroa, A., 2008. The role of young adolescents' perception in understanding the severity of exposure to community violence and PTSD. J. Interpers Violence 23 (11), 1555–1578. https://doi.org/10.1177/0886260508314318.
Aisenberg, E., Trickett, P.K., Mennen, F.E., Saltzman, W., Zayas, L.H., 2007. Maternal depression and adolescent behavior problems: an examination of mediation among immigrant Latino mothers and their adolescent children exposed to community violence. J. Interpers Violence 22 (10), 1227–1249. https://doi.org/10.1177/0886260507304292.
Allen, K., Goldman-Mellor, S., 2018. Neighborhood characteristics and adolescent suicidal behavior: evidence from a population-based Study. Suicide Life-Threatening Behav. 48 (6), 677–689. https://doi.org/10.1111/sltb.12391.
Allwood, M.A., Robinson, J.N., Kim, H., 2023. Youth exposure to Gun, knife, and physical assaults: assessing PTSD symptoms across types of assaults, race, ethnicity, sex, and context. J. Interpers Violence 38 (21–22), 11545–11568. https://doi.org/10.1177/08862605231185300.
Bailey, B.N., Delaney-Black, V., Hannigan, J.H., Ager, J., Sokol, R.J., Covington, C.Y., 2005. Somatic complaints in children and community violence exposure. J. Dev. Behav. Pediatr. : JDBP (J. Dev. Behav. Pediatr.) 26 (5), 341–348. https://doi.org/10.1097/00004703-200510000-00001.
Bailey, B.N., Hannigan, J.H., Delaney-Black, V., Covington, C., Sokol, R.J., 2006. The role of maternal acceptance in the relation between community violence exposure and child functioning. J. Abnorm. Child Psychol. 34 (1), 57–70. https://doi.org/10.1007/s10802-005-9002-y.
Banerjee, M., Rowley, S.J., Johnson, D.J., 2015. Community violence and racial socialization: their influence on the psychosocial well-being of African American college students. J. Black Psychol. 41 (4), 358–383. https://doi.org/10.1177/0095798414539174 ccm.
Bountress, K., Aggen, S.H., Kliewer, W., 2021. Is delinquency associated with subsequent victimization by community violence in adolescents? A Test of the risky behavior model in a primarily African American sample. Psychology of Violence 11 (3), 234–243. https://doi.org/10.1037/vio0000364.
Boyd, R.C., Wooden, T.D., Munro, M.A., Liu, T., Ten Have, T., 2008. The impact of community violence exposure on anxiety in children of mothers with depression. J. Child Adolesc. Trauma 1 (4), 287–299. https://doi.org/10.1080/19361520802505669.
Brady, R.G., Leverett, S.D., Mueller, L., Ruscitti, M., Latham, A.R., Smyser, T.A., Gerstein, E.D., Warner, B.B., Barch, D.M., Luby, J.L., Rogers, C.E., Smyser, C.D., 2024. Neighborhood crime and externalizing behavior in toddlers: a longitudinal Study with neonatal fMRI and parenting. J. Am. Acad. Child Adolesc. Psychiatr. 63 (7), 733–744. https://doi.org/10.1016/j.jaac.2023.09.547.
Briggs-Gowan, M.J., Carter, A.S., Ford, J.D., 2012. Parsing the effects violence exposure in early childhood: modeling developmental pathways. J. Pediatr. Psychol. 37 (1), 11–22. https://doi.org/10.1093/jpepsy/jsr063.
Brown, J.R., Hill, H.M., Lambert, S.F., 2005. Traumatic stress symptoms in women exposed to community and partner violence. J. Interpers Violence 20 (11), 1478–1494. https://doi.org/10.1177/0886260505278604.
Burgers, D.E., Drabick, D.A.G., 2016. Community violence exposure and generalized anxiety symptoms: does executive functioning serve a moderating role among low income, urban youth? J. Abnorm. Child Psychol. 44 (8), 1543–1557. https://doi.org/10.1007/s10802-016-0144-x.
Busby, D.R., Lambert, S.F., Ialongo, N.S., 2013. Psychological symptoms linking exposure to community violence and academic functioning in African American adolescents. J. Youth Adolesc. 42 (2), 250–262. https://doi.org/10.1007/s10964-012-9895-z.
Cazala, F., Sajous-Turner, A., Caldwell, M.F., Van Rybroek, G.J., Kiehl, K.A., Harenski, C. L., 2023. Childhood trauma predicts sadistic traits and violent behavior in incarcerated youth. Child Psychiatr. Hum. Dev. https://doi.org/10.1007/s10578-023-01494-0.
Ceballo, R., Ramirez, C., Hearn, K.D., Maltese, K.L., 2003. Community violence and children's psychological well-being: does parental monitoring matter? J. Clin. Child Adolesc. Psychol. : The Official Journal for the Society of Clinical Child and Adolescent Psychology 32 (4), 586–592. https://doi.org/10.1207/S15374424JCCP3204_11. American Psychological Association, Division 53.
Cerdá, M., Tracy, M., Sánchez, B.N., Galea, S., 2011. Comorbidity among depression, conduct disorder, and drug use from adolescence to young adulthood: examining the role of violence exposures. J. Trauma Stress 24 (6), 651–659. https://doi.org/10.1002/jts.20696.
Chen, P., Voisin, D.R., Marotta, P.L., Jacobson, K.C., 2020. Racial and ethnic comparison of ecological risk factors and youth outcomes: a test of the desensitization hypothesis. J. Child Fam. Stud. 29 (10), 2722–2733. https://doi.org/10.1007/s10826-020-01772-8.
Chua, K.J., Lukaszewski, A.W., Grant, D.M., Sng, O., 2017. Human life history strategies. Evol. Psychol. : An International Journal of Evolutionary Approaches to Psychology and Behavior 15 (1), 1474704916677342. https://doi.org/10.1177/1474704916677342.
Cole, A.R., Jaccard, J., Munson, M.R., 2020. Young adult trauma symptoms in the context of community violence exposure. J. Community Psychol. 48 (8), 2517–2531. https://doi.org/10.1002/jcop.22437.
Compton, K.S., Barr, P., Karriker-Jaffe, K.J., Bares, C., Aliev, F., Mustanski, B., Dick, D., Chartier, K.G., 2019. Evaluating neighborhood, social, and genetic influences on precursors of alcohol use risk behavior in African American adolescents. Int. J. Environ. Res. Publ. Health 16 (17). https://doi.org/10.3390/ijerph16173078.
Cooley, J.L., Ritschel, L.A., Frazer, A.L., Blossom, J.B., 2019. The influence of internalizing symptoms and emotion dysregulation on the Association between witnessed community violence and aggression among urban adolescents. Child Psychiatr. Hum. Dev. 50 (6), 883–893. https://doi.org/10.1007/s10578-019-00890-9.
Cooley-Quille, M., Boyd, R.C., Frantz, E., Walsh, J., 2001. Emotional and behavioral impact of exposure to community violence in inner-city adolescents. J. Clin. Child Psychol. 30 (2), 199–206. https://doi.org/10.1207/S15374424JCCP3002_7.
Cooper, H.L.F., Hunter-Jones, J., Kelley, M.E., Karnes, C., Haley, D.F., Ross, Z., Rothenberg, R., Bonney, L.E., 2014. The aftermath of public housing relocations: relationships between changes in local socioeconomic conditions and depressive symptoms in a cohort of adult relocaters. J. Urban Health : Bull. N. Y. Acad. Med. 91 (2), 223–241. https://doi.org/10.1007/s11524-013-9844-5.
Copeland-Linder, N., Lambert, S.F., Ialongo, N.S., 2010. Community violence, protective factors, and adolescent mental health: a profile analysis. J. Clin. Child Adolesc. Psychol. 39 (2), 176–186. https://doi.org/10.1080/15374410903532601. The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53.
Curry, A., Latkin, C., Davey-Rothwell, M., 2008. Pathways to depression: the impact of neighborhood violent crime on inner-city residents in Baltimore, Maryland, USA. Soc. Sci. Med. 67 (1), 23–30. https://doi.org/10.1016/j.socscimed.2008.03.007.
Deane, K., Richards, M., Santiago, C.D., 2021. Violence exposure, posttraumatic stress, and affect variability among African American Youth: a time sampling approach. Dev. Psychopathol. 33 (3), 1085–1096. https://doi.org/10.1017/S095457942000036X.
Denson, T.F., Marshall, G.N., Schell, T.L., Jaycox, L.H., 2007. Predictors of posttraumatic distress 1 year after exposure to community violence: the importance of acute symptom severity. J. Consult. Clin. Psychol. 75 (5), 683–692. https://doi.org/10.1037/0022-006X.75.5.683.
DiClemente, C.M., Richards, M.H., 2022. Community violence in early adolescence: assessing coping strategies for reducing delinquency and aggression. J. Clin. Child Adolesc. Psychol. : The Official Journal for the Society of Clinical Child and Adolescent Psychology 51 (2), 155–169. https://doi.org/10.1080/15374416.2019.1650365. American Psychological Association, Division 53.
Dierkhising, C.B., Sanchez, J.A., Gutierrez, L., 2021. "It changed my life": traumatic loss, behavioral health, and turning points among gang-involved and justice-involved youth. J. Interpers Violence 36 (17–18), 8027–8049. https://doi.org/10.1177/0886260519847779.
Douglas, R.D., Alli, J.O., Gaylord-Harden, N., Opara, I., Gilreath, T., 2024. Examining the integrated model of the interpersonal-psychological theory of suicide and intersectionality theory among Black male adolescents. Suicide Life-Threatening Behav. https://doi.org/10.1111/sltb.13066.
Dulmus, C.N., Hilarski, C., 2006. Significance of gender and age in African American children's response to parental victimization. Health Soc. Work 31 (3), 181–188. https://doi.org/10.1093/hsw/31.3.181.
Edlynn, E.S., Gaylord-Harden, N.K., Richards, M.H., Miller, S.A., 2008. African American inner-city youth exposed to violence: coping skills as a moderator for anxiety. Am. J. Orthopsychiatry 78 (2), 249–258. https://doi.org/10.1037/a0013948.
Eiden, R.D., Coles, C.D., Schuetze, P., Colder, C.R., 2014. Externalizing behavior problems among polydrug cocaine-exposed children: indirect pathways via maternal harshness and self-regulation in early childhood. Psychol. Addict. Behav. : Journal of the Society of Psychologists in Addictive Behaviors 28 (1), 139–153. https://doi.org/10.1037/a0032632.
Elifson, K.W., Klein, H., Sterk, C.E., 2016. The value of using a syndemics theory conceptual model to understand the factors associated with obesity in a Southern, urban community sample of disadvantaged African-American adults. J. Natl. Black Nurses' Assoc. JNBNA : J. Natl. Black Nurses' Assoc. JNBNA 27 (1), 1–10.
Everett, V.S., Drabick, D.A.G., 2023. Community violence exposure and generalized anxiety symptoms: do callous-unemotional behaviors moderate this relation among urban youth? Research on Child and Adolescent Psychopathology 51 (1), 87–102. https://doi.org/10.1007/s10802-022-00973-7.
Ewart, C.K., Suchday, S., 2002. Discovering how urban poverty and violence affect health: development and validation of a Neighborhood Stress Index. Health Psychol.

: Official Journal of the Division of Health Psychology 21 (3), 254–262. https://doi.org/10.1037//0278-6133.21.3.254. American Psychological Association.
Farrell, A.D., Pittman, S., Bettencourt, A.F., Mehari, K.R., Dunn, C., Sullivan, T.N., 2022. Beliefs as mediators of relations between exposure to violence and physical aggression during early adolescence. J. Early Adolesc. 42 (3), 297–326. https://doi.org/10.1177/02724316211036747.
Farrell, A.D., Thompson, E.L., Curran, P.J., Sullivan, T.N., 2020. Bidirectional relations between witnessing violence, victimization, life events, and physical aggression among adolescents in urban schools. J. Youth Adolesc. 49 (6), 1309–1327. https://doi.org/10.1007/s10964-020-01204-2.
Farver, J.A.M., Xu, Y., Eppe, S., Fernandez, A., Schwartz, D., 2005. Community violence, family conflict, and preschoolers' socioemotional functioning. Dev. Psychol. 41 (1), 160–170. https://doi.org/10.1037/0012-1649.41.1.160.
Fishbein, D., Warner, T., Krebs, C., Trevarthen, N., Flannery, B., Hammond, J., 2009. Differential relationships between personal and community stressors and children's neurocognitive functioning. Child. Maltreat. 14 (4), 299–315. https://doi.org/10.1177/1077559508326355.
Fite, P.J., Hendrickson, M.L., Evans, S., Rubens, S.L., Johnson-Motoyama, M., Savage, J., 2014. Associations between proactive and reactive subtypes of aggression and lifetime substance use in a sample of predominantly Hispanic adolescents. J. Child Adolesc. Subst. Abuse 23 (6), 398–406. https://doi.org/10.1080/1067828X.2012.748440 ccm.
Foell, A., Pitzer, K.A., Nebbitt, V., Lombe, M., Yu, M., Villodas, M.L., Enelamah, N., Lateef, H., 2024. Anxiety sensitivity among Black youth: a cross-sectional analysis of the direct and indirect effects of community violence exposure, neighborhood risk, parenting practices, and peer effects. J. Natl. Med. Assoc. https://doi.org/10.1016/j.jnma.2024.07.005. S0027-9684(24)00086-5.
Foell, A., Pitzer, K.A., Nebbitt, V., Lombe, M., Yu, M., Villodas, M.L., Newransky, C., 2021. Exposure to community violence and depressive symptoms: examining community, family, and peer effects among public housing youth. Health Place 69, 102579. https://doi.org/10.1016/j.healthplace.2021.102579.
Forehand, R., Jones, D.J., 2003. Neighborhood violence and coparent conflict: interactive influence on child psychosocial adjustment. J. Abnorm. Child Psychol. 31 (6), 591–604. https://doi.org/10.1023/a:1026206122470.
Fowler, P.J., Ahmed, S.R., Tompsett, C.J., Jozefowicz-Simbeni, D.M.H., Toro, P.A., 2008. Community violence and externalizing problems: moderating effects of race and religiosity in emerging adulthood. J. Community Psychol. 36 (7), 835–850. https://doi.org/10.1002/jcop.20267.
Garrido, E.F., Culhane, S.E., Petrenko, C.L.M., Taussig, H.N., 2011. Psychosocial consequences of caregiver transitions for maltreated youth entering foster care: the moderating impact of community violence exposure. Am. J. Orthopsychiatry 81 (3), 382–389. https://doi.org/10.1111/j.1939-0025.2011.01106.x.
Garrido, E.F., Culhane, S.E., Raviv, T., Taussig, H.N., 2010. Does community violence exposure predict trauma symptoms in a sample of maltreated youth in foster care? Violence Vict. 25 (6), 755–769. https://doi.org/10.1891/0886-6708.25.6.755.
Gaylord-Harden, N.K., Bai, G.J., Simic, D., 2017. Examining a dual-process model of desensitization and hypersensitization to community violence in African American Male adolescents. J. Trauma Stress 30 (5), 463–471. https://doi.org/10.1002/jts.22220.
Gaylord-Harden, N.K., Cunningham, J.A., Zelencik, B., 2011. Effects of exposure to community violence on internalizing symptoms: does desensitization to violence occur in African American youth? J. Abnorm. Child Psychol. 39 (5), 711–719. https://doi.org/10.1007/s10802-011-9510-x.
Gaylord-Harden, N.K., So, S., Bai, G.J., Henry, D.B., Tolan, P.H., 2017. Examining the pathologic adaptation model of community violence exposure in Male adolescents of color. J. Clin. Child Adolesc. Psychol. 46 (1), 125–135. https://doi.org/10.1080/15374416.2016.1204925. *The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53.*
Geller, P.A., Neugebauer, R., Possemato, A.K., Walter, P., Dummit 3rd, E.S., Silva, R.R., 2007. Psychometric properties of Darryl, a cartoon based measure to assess community violence-related PTSD in children. Psychiatr. Q. 78 (2), 157–168. https://doi.org/10.1007/s11126-006-9035-6.
Gepty, A.A., Hamilton, J.L., Abramson, L.Y., Alloy, L.B., 2019. The combination of living in high crime neighborhoods and high rumination predicts depressive symptoms among adolescents. J. Youth Adolesc. 48 (11), 2141–2151. https://doi.org/10.1007/s10964-019-01150-8.
Goldman-Mellor, S., Margerison-Zilko, C., Allen, K., Cerda, M., 2016. Perceived and objectively-measured neighborhood violence and adolescent psychological distress. J. Urban Health : Bull. N. Y. Acad. Med. 93 (5), 758–769. https://doi.org/10.1007/s11524-016-0079-0.
Goldstein, A.L., Walton, M.A., Cunningham, R.M., Trowbridge, M.J., Maio, R.F., 2007. Violence and substance use as risk factors for depressive symptoms among adolescents in an urban emergency department. J. Adolesc. Health : Official Publication of the Society for Adolescent Medicine 40 (3), 276–279. https://doi.org/10.1016/j.jadohealth.2006.09.023.
Goldweber, A., Bradshaw, C.P., Goodman, K., Monahan, K., Cooley-Strickland, M., 2011. Examining factors associated with (in)stability in social information processing among urban school children: a latent transition analytic approach. J. Clin. Child Adolesc. Psychol. 40 (5), 715–729. https://doi.org/10.1080/15374416.2011.597088. The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53.
Gomez, C., Baca, S.A., Ryder, A., Gudiño, O.G., 2024. Understanding the concurrence of environmental characteristics in Latino youth: a person-centered approach. J. Community Psychol. 52 (1), 74–88. https://doi.org/10.1002/jcop.23086.
Gorman-Smith, D., Tolan, P., 1998. The role of exposure to community violence and developmental problems among inner-city youth. Dev. Psychopathol. 10 (1), 101–116. https://doi.org/10.1017/s0954579498001539.
Gudiño, O.G., 2013. Behavioral inhibition and risk for posttraumatic stress symptoms in Latino children exposed to violence. J. Abnorm. Child Psychol. 41 (6), 983–992. https://doi.org/10.1007/s10802-013-9731-2.
Gudiño, O.G., Rindlaub, L.A., 2014. Psychometric properties of the Child PTSD Symptom Scale in Latino children. J. Trauma Stress 27 (1), 27–34. https://doi.org/10.1002/jts.21884.
Hammack, P.L., Richards, M.H., Luo, Z., Edlynn, E.S., Roy, K., 2004. Social support factors as moderators of community violence exposure among inner-city African American young adolescents. J. Clin. Child Adolesc. Psychol. : The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53 33 (3), 450–462. https://doi.org/10.1207/s15374424jccp3303_3.
Hart, S.L., Hodgkinson, S.C., Belcher, H.M.E., Hyman, C., Cooley-Strickland, M., 2013. Somatic symptoms, peer and school stress, and family and community violence exposure among urban elementary school children. J. Behav. Med. 36 (5), 454–465. https://doi.org/10.1007/s10865-012-9440-2.
Hastings, T.L., Kelley, M.L., 1997. Development and validation of the screen for adolescent violence exposure (SAVE). J. Abnorm. Child Psychol. 25 (6), 511–520. https://doi.org/10.1023/a:1022641916705.
Ho, J., 2008. Community violence exposure of Southeast Asian American adolescents. J. Interpers Violence 23 (1), 136–146. https://doi.org/10.1177/0886260507307653.
Hunt, K.L., Martens, P.M., Belcher, H.M.E., 2011. Risky business: trauma exposure and rate of posttraumatic stress disorder in African American children and adolescents. J. Trauma Stress 24 (3), 365–369. https://doi.org/10.1002/jts.20648.
Jakubovic, R.J., Drabick, D.A.G., 2020. Community violence exposure and youth aggression: the moderating role of working memory. J. Abnorm. Child Psychol. 48 (11), 1471–1484. https://doi.org/10.1007/s10802-020-00683-y.
Javdani, S., Abdul-Adil, J., Suarez, L., Nichols, S.R., Farmer, A.D., 2014. Gender differences in the effects of community violence on mental health outcomes in a sample of low-income youth receiving psychiatric care. Am. J. Community Psychol. 53 (3–4), 235–248. https://doi.org/10.1007/s10464-014-9638-2.
Kennedy, A.C., Bybee, D., Sullivan, C.M., Greeson, M., 2009. The effects of community and family violence exposure on anxiety trajectories during middle childhood: the role of family social support as a moderator. J. Clin. Child Adolesc. Psychol. 38 (3), 365–379. https://doi.org/10.1080/15374410902851713.
Kimonis, E.R., Frick, P.J., Munoz, L.C., Aucoin, K.J., 2008. Callous-unemotional traits and the emotional processing of distress cues in detained boys: testing the moderating role of aggression, exposure to community violence, and histories of abuse. Dev. Psychopathol. 20 (2), 569–589. https://doi.org/10.1017/S095457940800028X.
Kliewer, W., Cunningham, J.N., Diehl, R., Parrish, K.A., Walker, J.M., Atiyeh, C., Neace, B., Duncan, L., Taylor, K., Mejia, R., 2004. Violence exposure and adjustment in inner-city youth: child and caregiver emotion regulation skill, caregiver-child relationship quality, and neighborhood cohesion as protective factor. J. Clin. Child Adolesc. Psychol. 33 (3), 477–487. https://doi.org/10.1207/s15374424jccp3303_5. *The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53.*
Kliewer, W., Sullivan, T.N., 2008. Community violence exposure, threat appraisal, and adjustment in adolescents. J. Clin. Child Adolesc. Psychol. : The Official Journal for the Society of Clinical Child and Adolescent Psychology 37 (4), 860–873. https://doi.org/10.1080/15374410802359718. American Psychological Association, Division 53.
Kub, J.E., DePriest, K.N., Bellin, M.H., Butz, A., Lewis-Land, C., Morphew, T., 2022. Predictors of depressive symptoms in caregivers of children with poorly controlled asthma: is the neighborhood context important? Fam. Community Health 45 (1), 10–22. https://doi.org/10.1097/FCH.0000000000000313.
La Barrie, D.L., Zegarac, M., Mekawi, Y., Kuzyk, E., Stenson, A.F., Jovanovic, T., Bradley, B., Powers, A., 2022. The role of specific emotion dysregulation facets in the association between child violence exposure and psychopathology. Psychol. Trauma, Theory Res. Pract. Pol. https://doi.org/10.1037/tra0001265.
Lai, B.S., Osborne, M.C., Lee, N., Self-Brown, S., Esnard, A.-M., Kelley, M.L., 2018. Trauma-informed schools: child disaster exposure, community violence and somatic symptoms. J. Affect. Disord. 238, 586–592. https://doi.org/10.1016/j.jad.2018.05.062.
Lambert, S.F., Boyd, R.C., Ialongo, N.S., 2022. Protective factors for suicidal ideation among Black adolescents indirectly exposed to community violence. Suicide Life-Threatening Behav. 52 (3), 478–489. https://doi.org/10.1111/sltb.12839.
Lambert, S.F., Copeland-Linder, N., Ialongo, N.S., 2008. Longitudinal associations between community violence exposure and suicidality. J. Adolesc. Health : Official Publication of the Society for Adolescent Medicine 43 (4), 380–386. https://doi.org/10.1016/j.jadohealth.2008.02.015.
Last, B.S., Rudd, B.N., Gregor, C.A., Kratz, H.E., Jackson, K., Berkowitz, S., Zinny, A., Cliggitt, L.P., Adams, D.R., Walsh, L.M., Beidas, R.S., 2020. Sociodemographic characteristics of youth in a trauma focused-cognitive behavioral therapy effectiveness trial in the city of Philadelphia. J. Community Psychol. 48 (4), 1273–1293. https://doi.org/10.1002/jcop.22306.
Lawrence, T.I., Hong, J.S., Sopchak, K.S., Voisin, D.R., 2023. The association between exposure to community violence and somatic symptoms through bullying victimization among African American adolescents in Chicago: a developmental trauma approach. J. Clin. Psychol. 79 (5), 1280–1292. https://doi.org/10.1002/jclp.23475.

Lee, J.M., Hong, J.S., Resko, S.M., Gonzalez-Prendes, A.A., Voisin, D.R., 2022. Pathways from exposure to community violence to bullying victimization among African American adolescents in Chicago's southside. Int. J. Environ. Res. Publ. Health 19 (15). https://doi.org/10.3390/ijerph19159453.

Lewis, M.W., Wu, L., 2021. Exposure to community violence versus overpolicing and PTSD among African American university students. J. Hum. Behav. Soc. Environ. 31 (8), 1026–1039. https://doi.org/10.1080/10911359.2020.1838382 ccm.

Li, X., Howard, D., Stanton, B., Rachuba, L., Cross, S., 1998. Distress symptoms among urban African American children and adolescents: a psychometric evaluation of the Checklist of Children's distress Symptoms. Arch. Pediatr. Adolesc. Med. 152 (6), 569–577. https://doi.org/10.1001/archpedi.152.6.569.

Liu, J., Bolland, J.M., Dick, D., Mustanski, B., Kertes, D.A., 2016. Effect of environmental risk and externalizing comorbidity on internalizing problems among economically disadvantaged African American youth. J. Res. Adolesc. 26 (3), 552–566. https://doi.org/10.1111/jora.12213.

Liu, J., Mustanski, B., Dick, D., Bolland, J., Kertes, D.A., 2017. Risk and protective factors for comorbid internalizing and externalizing problems among economically disadvantaged African American youth. Dev. Psychopathol. 29 (3), 1043–1056. https://doi.org/10.1017/S0954579416001012.

Löfving-Gupta, S., Lindblad, F., Stickley, A., Schwab-Stone, M., Ruchkin, V., 2015. Community violence exposure and severe posttraumatic stress in suburban American youth: risk and protective factors. Soc. Psychiatr. Psychiatr. Epidemiol. 50 (4), 539–547. https://doi.org/10.1007/s00127-014-0965-2.

Lopez-Tamayo, R., Suarez, L., Simpson, D., Volpe, K., 2022. The impact of adverse childhood experiences and community violence exposure on a sample of anxious, treatment-seeking children. J. Child Adolesc. Trauma 15 (4), 1081–1093. https://doi.org/10.1007/s40653-022-00447-4.

Lown, E.A., Cherpitel, C.J., Zemore, S.E., Borges, G., Greenfield, T.K., 2017. Hazardous drinking and exposure to interpersonal and community violence on both sides of the U.S. -Mexico border. Hisp. J. Behav. Sci. 39 (4), 528–545. https://doi.org/10.1177/0739986317720911.

Luby, J.L., Herzberg, M.P., Hoyniak, C., Tillman, R., Lean, R.E., Brady, R., Triplett, R., Alexopoulos, D., Loseille, D., Smyser, T., Rogers, C.E., Warner, B., Smyser, C.D., Barch, D.M., 2024. Basic environmental supports for positive brain and cognitive development in the first year of life. JAMA Pediatr. 178 (5), 465–472. https://doi.org/10.1001/jamapediatrics.2024.0143.

Lynch, M., Cicchetti, D., 1998. An ecological-transactional analysis of children and contexts: the longitudinal interplay among child maltreatment, community violence, and children's symptomatology. Dev. Psychopathol. 10 (2), 235–257. https://doi.org/10.1017/s095457949800159x.

Madan, A., Mrug, S., Windle, M., 2011. Brief report: do delinquency and community violence exposure explain internalizing problems in early adolescent gang members? J. Adolesc. 34 (5), 1093–1096. https://doi.org/10.1016/j.adolescence.2010.06.003.

Malik, N.M., 2008. Exposure to domestic and community violence in a nonrisk sample: associations with child functioning. J. Interpers Violence 23 (4), 490–504. https://doi.org/10.1177/0886260507312945.

Manly, J.T., Oshri, A., Lynch, M., Herzog, M., Wortel, S., 2013. Child neglect and the development of externalizing behavior problems: associations with maternal drug dependence and neighborhood crime. Child. Maltreat. 18 (1), 17–29. https://doi.org/10.1177/1077559512464119.

Marshall, G.N., Orlando, M., 2002. Acculturation and peritraumatic dissociation in young adult Latino survivors of community violence. J. Abnorm. Psychol. 111 (1), 166–174. https://doi.org/10.1037/0021-843X.111.1.166.

Marshall, G.N., Schell, T.L., Elliott, M.N., Berthold, S.M., Chun, C.-A., 2005. Mental health of Cambodian refugees 2 decades after resettlement in the United States. JAMA 294 (5), 571–579. https://doi.org/10.1001/jama.294.5.571.

McLaughlin, K.A., Rith-Najarian, L., Dirks, M.A., Sheridan, M.A., 2015. Low vagal tone magnifies the association between psychosocial stress exposure and internalizing psychopathology in adolescents. J. Clin. Child Adolesc. Psychol. : The Official Journal for the Society of Clinical Child and Adolescent Psychology 44 (2), 314–328. https://doi.org/10.1080/15374416.2013.843464. American Psychological Association, Division 53.

McMahon, S.D., Todd, N.R., Martinez, A., Coker, C., Sheu, C.-F., Washburn, J., Shah, S., 2013. Aggressive and prosocial behavior: community violence, cognitive, and behavioral predictors among urban African American youth. Am. J. Community Psychol. 51 (3–4), 407–421. https://doi.org/10.1007/s10464-012-9560-4.

Mendenhall, E., Jacobs, E.A., 2012. Interpersonal abuse and depression among Mexican immigrant women with type 2 diabetes. Cult. Med. Psychiatr. 36 (1), 136–153. https://doi.org/10.1007/s11013-011-9240-0.

Milan, S., Zona, K., Acker, J., Turcios-Cotto, V., 2013. Prospective risk factors for adolescent PTSD: sources of differential exposure and differential vulnerability. J. Abnorm. Child Psychol. 41 (2), 339–353. https://doi.org/10.1007/s10802-012-9677-9.

Mitchell, S.J., Lewin, A., Horn, I.B., Valentine, D., Sanders-Phillips, K., Joseph, J.G., 2010. How does violence exposure affect the psychological health and parenting of young African-American mothers? Soc. Sci. Med. 70 (4), 526–533. https://doi.org/10.1016/j.socscimed.2009.10.048.

Mitchell, S.J., Ronzio, C.R., 2011. Violence and other stressful life events as triggers of depression and anxiety: what psychosocial resources protect African American mothers? Matern. Child Health J. 15 (8), 1272–1281. https://doi.org/10.1007/s10995-010-0668-6.

Moed, A., Gershoff, E.T., Bringewatt, E.H., 2017. Violence exposure as a mediator between parenting and adolescent mental health. Child Psychiatr. Hum. Dev. 48 (2), 235–247. https://doi.org/10.1007/s10578-016-0636-5.

Mrug, S., Windle, M., 2010. Prospective effects of violence exposure across multiple contexts on early adolescents' internalizing and externalizing problems. J. Child Psychol. Psychiatry Allied Discip. 51 (8), 953–961. https://doi.org/10.1111/j.1469-7610.2010.02222.x.

Nickerson, A.B., Shisler, S.M., Eiden, R.D., Ostrov, J.M., Schuetze, P., Godleski, S.A., Delmerico, A.M., 2020. A longitudinal study of Gun violence attitudes: role of childhood aggression and exposure to violence, and early adolescent bullying perpetration and victimization. J. Sch. Violence 19 (1), 62–76. https://doi.org/10.1080/15388220.2019.1703716.

O'Donnell, L., Vrba, E., Miller, M., Dash, K., Kar, H., Reed, G.A., 2020. Inward- and outward-directed violence in the lives of urban minority adults followed from middle school into their thirties. Am. J. Community Psychol. 65 (3–4), 397–406. https://doi.org/10.1002/ajcp.12408.

Osofsky, J.D., Wewers, S., Hann, D.M., Fick, A.C., 1993. Chronic community violence: what is happening to our children? Psychiatry 56 (1), 36–45. https://doi.org/10.1080/00332747.1993.11024619.

Ozer, E.J., McDonald, K.L., 2006. Exposure to violence and mental health among Chinese American urban adolescents. J. Adolesc. Health : Official Publication of the Society for Adolescent Medicine 39 (1), 73–79. https://doi.org/10.1016/j.jadohealth.2005.09.015.

Ozer, E.J., Weinstein, R.S., 2004. Urban adolescents' exposure to community violence: the role of support, school safety, and social constraints in a school-based sample of boys and girls. J. Clin. Child Adolesc. Psychol. 33 (3), 463–476. https://doi.org/10.1207/s15374424jccp3303_4. The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53.

Patterson, F., Seravalli, L., Hanlon, A., Nelson, D.B., 2012. Neighborhood safety as a correlate of tobacco use in a sample of urban, pregnant women. Addict. Behav. 37 (10), 1132–1137. https://doi.org/10.1016/j.addbeh.2012.05.011.

Paxton, K.C., Robinson, W.L., Shah, S., Schoeny, M.E., 2004. Psychological distress for African-American adolescent males: exposure to community violence and social support as factors. Child Psychiatr. Hum. Dev. 34 (4), 281–295. https://doi.org/10.1023/B:CHUD.0000020680.67029.4f.

Petering, R., Rhoades, H., Winetrobe, H., Dent, D., Rice, E., 2017. Violence, trauma, mental health, and substance use among homeless youth Juggalos. Child Psychiatr. Hum. Dev. 48 (4), 642–650. https://doi.org/10.1007/s10578-016-0689-5.

Quinn, K.G., Hunt, B.R., Jacobs, J., Valencia, J., Voisin, D., Walsh, J.L., 2023. Examining the relationship between anti-black racism, community and police violence, and COVID-19 vaccination. Behav. Med. 1–10. https://doi.org/10.1080/08964289.2023.2244626.

Quinn, K., Voisin, D.R., Bouris, A., Schneider, J., 2016. Psychological distress, drug use, sexual risks and medication adherence among young HIV-positive Black men who have sex with men: exposure to community violence matters. AIDS Care 28 (7), 866–872. https://doi.org/10.1080/09540121.2016.1153596.

Ricard, J.R., Hyde, L.W., Baskin-Sommers, A., 2024. Person-Centered combinations of individual, familial, neighborhood, and structural risk factors differentially relate to antisocial behavior and psychopathology. Crim. Justice Behav. 51 (9), 1339–1357. https://doi.org/10.1177/00938548241246146.

Robinson, W.L., Paxton, K.C., Jonen, L.P., 2011. Pathways to aggression and violence among African American adolescent males: the influence of normative beliefs, neighborhood, and depressive symptomatology. J. Prev. Interv. Community 39 (2), 132–148. https://doi.org/10.1080/10852352.2011.556572.

Rosario, M., Salzinger, S., Feldman, R.S., Ng-Mak, D.S., 2008. Intervening processes between youths' exposure to community violence and internalizing symptoms over time: the roles of social support and coping. Am. J. Community Psychol. 41 (1–2), 43–62. https://doi.org/10.1007/s10464-007-9147-7.

Rosenfield, D., Jouriles, E.N., McDonald, R., Mueller, V., 2014. Interparental conflict, community violence, and child problems: making sense of counterintuitive findings. Am. J. Orthopsychiatry 84 (3), 275–283. https://doi.org/10.1037/h0099805.

Rosenthal, B.S., 2000. Exposure to community violence in adolescence: trauma symptoms. Adolescence 35 (138), 271–284.

Rosenthal, B.S., Wilson, W.C., 2003a. Impact of exposure to community violence and psychological symptoms on college performance among students of color. Adolescence 38 (150), 239–249.

Rosenthal, B.S., Wilson, W.C., 2003b. The association of ecological variables and psychological distress with exposure to community violence among adolescents. Adolescence 38 (151), 459–479.

Rosenthal, B.S., Wilson, W.C., 2008. Community violence and psychological distress: the protective effects of emotional social support and sense of personal control among older adolescents. Adolescence 43 (172), 693–712.

Roy, A.L., Isaia, A.R., DaViera, A.L., Eisenberg, Y., Poulos, C.D., 2021. Redefining exposure: using Mobile technology and geospatial analysis to explore when and where Chicago adolescents are exposed to neighborhood characteristics. Am. J. Community Psychol. 68 (1–2), 18–28. https://doi.org/10.1002/ajcp.12490.

Ruchkin, V., Isaksson, J., Stickley, A., Schwab-Stone, M., 2023. Longitudinal associations between community violence exposure and mental health problems in inner-city youth: ethnicity and gender perspectives. J. Interpers Violence 38 (13–14), 8619–8644. https://doi.org/10.1177/08862605231158754.

Salzinger, S., Rosario, M., Feldman, R.S., Ng-Mak, D.S., 2011. Role of parent and peer relationships and individual characteristics in middle school children's behavioral outcomes in the face of community violence. J. Res. Adolesc. : The Official Journal of the Society for Research on Adolescence 21 (2), 395–407. https://doi.org/10.1111/j.1532-7795.2010.00677.x.

Scarpa, A., Haden, S.C., Hurley, J., 2006. Community violence victimization and symptoms of posttraumatic stress disorder: the moderating effects of coping and social support. J. Interpers Violence 21 (4), 446–469. https://doi.org/10.1177/0886260505285726.

Schwartz, D., Proctor, L.J., 2000. Community violence exposure and children's social adjustment in the school peer group: the mediating roles of emotion regulation and social cognition. J. Consult. Clin. Psychol. 68 (4), 670–683.
Scott, S.B., Munoz, E., Mogle, J.A., Gamaldo, A.A., Smyth, J.M., Almeida, D.M., Sliwinski, M.J., 2018. Perceived neighborhood characteristics predict severity and emotional response to daily stressors. Soc. Sci. Med. 200, 262–270. https://doi.org/10.1016/j.socscimed.2017.11.010.
Self-Brown, S., LeBlanc, M.M., David, K., Shepard, D., Ryan, K., Hodges, A., Kelley, M.L., 2012. The impact of parental trauma exposure on community violence exposed adolescents. Violence Vict. 27 (4), 512–526. https://doi.org/10.1891/0886-6708.27.4.512.
Self-Brown, S.R., LeBlanc, M., Kelley, M.L., Hanson, R., Laslie, K., Wingate, A., 2006. Effects of community violence exposure and parental mental health on the internalizing problems of urban adolescents. Violence Vict. 21 (2), 183–198. https://doi.org/10.1891/vivi.21.2.183.
Shannon, M.M., Clougherty, J.E., McCarthy, C., Elovitz, M.A., Nguemeni Tiako, M.J., Melly, S.J., Burris, H.H., 2020. Neighborhood violent crime and perceived stress in pregnancy. Int. J. Environ. Res. Publ. Health 17 (15). https://doi.org/10.3390/ijerph17155585.
Shields, N., Nadasen, K., Pierce, L., 2013. Community violence and psychological distress in South African and U.S. children. International Perspectives in Psychology: Research, Practice, Consultation 2 (4), 286–300. https://doi.org/10.1037/a0033271.
So, S., Gaylord-Harden, N.K., Voisin, D.R., 2021. Examining the factor structure of the coping with community violence Scale for urban youth. J. Interpers Violence 36 (1–2), NP1127–NP1154. https://doi.org/10.1177/0886260517739889.
Sun, S., Crooks, N., DiClemente, R.J., Sales, J.M., 2020. Perceived neighborhood violence and crime, emotion regulation, and PTSD symptoms among justice-involved, urban African-American adolescent girls. Psychol. Trauma, Theory Res. Pract. Pol. 12 (6), 593–598. https://doi.org/10.1037/tra0000562.
Sweeney, C.K., Goldner, J., Richards, M.H., 2011. Exposure to community violence and daily feeling states among urban African American youth. J. Prev. Interv. Community 39 (2), 114–131. https://doi.org/10.1080/10852352.2011.556560.
Tache, R.M., Lambert, S.F., Ganiban, J.M., Ialongo, N.S., 2018. Temperament moderators of prospective associations between community violence exposure and urban African American adolescents' aggressive behavior. Child Psychiatr. Hum. Dev. 49 (5), 709–717. https://doi.org/10.1007/s10578-018-0787-7.
Tamura, K., Langerman, S.D., Orstad, S.L., Neally, S.J., Andrews, M.R., Ceasar, J.N., Sims, M., Lee, J.E., Powell-Wiley, T.M., 2020. Physical activity-mediated associations between perceived neighborhood social environment and depressive symptoms among Jackson Heart Study participants. Int. J. Behav. Nutr. Phys. Activ. 17 (1), 91. https://doi.org/10.1186/s12966-020-00991-y.
Teixeira da Silva, D., Bouris, A., Voisin, D., Hotton, A., Brewer, R., Schneider, J., 2020. Social networks moderate the syndemic effect of psychosocial and structural factors on HIV risk among young Black transgender women and men who have sex with men. AIDS Behav. 24 (1), 192–205. https://doi.org/10.1007/s10461-019-02575-9.
Tonorezos, E.S., Breysse, P.N., Matsui, E.C., McCormack, M.C., Curtin-Brosnan, J., Williams, D., Hansel, N.N., Eggleston, P.A., Diette, G.B., 2008. Does neighborhood violence lead to depression among caregivers of children with asthma? Soc. Sci. Med. 67 (1), 31–37. https://doi.org/10.1016/j.socscimed.2008.02.028.
Udell, W.A., Hotton, A.L., Emerson, E., Donenberg, G.R., 2017. Does parental monitoring moderate the impact of community violence exposure on probation youth's substance use and sexual risk behavior? J. Child Fam. Stud. 26 (9), 2556–2563. https://doi.org/10.1007/s10826-017-0769-6.
Voisin, D.R., Neilands, T.B., Salazar, L.F., Crosby, R., Diclemente, R.J., 2008. Pathways to drug and sexual risk behaviors among detained adolescents. Soc. Work. Res. 32 (3), 147–157. https://doi.org/10.1093/swr/32.3.147.
Welles, S.L., Patel, F., Chilton, M., 2017. Does employment-related resilience affect the relationship between childhood adversity, community violence, and depression? J. Urban Health : Bull. N. Y. Acad. Med. 94 (2), 233–243. https://doi.org/10.1007/s11524-016-0117-y.
Williford, A., Fite, P.J., Johnson-Motoyama, M., Frazer, A.L., 2015. Acculturative dissonance and risks for proactive and reactive aggression among Latino/a adolescents: implications for culturally relevant prevention and interventions. J. Prim. Prev. 36 (6), 405–418. https://doi.org/10.1007/s10935-015-0403-6.
Wilson-Genderson, M., Pruchno, R., 2013. Effects of neighborhood violence and perceptions of neighborhood safety on depressive symptoms of older adults. Soc. Sci. Med. 85, 43–49. https://doi.org/10.1016/j.socscimed.2013.02.028.
Wright, E.M., Fagan, A.A., Pinchevsky, G.M., 2013. The effects of exposure to violence and victimization across life domains on adolescent substance use. Child Abuse Neglect 37 (11), 899–909. https://doi.org/10.1016/j.chiabu.2013.04.010.
Yang, C., German, D., Webster, D., Latkin, C., Yang, C., German, D., Webster, D., Latkin, C., 2011. Experiencing violence as a predictor of drug use relapse among former drug users in Baltimore, Maryland. J. Urban Health 88 (6), 1044–1051. https://doi.org/10.1007/s11524-011-9610-5 ccm.
Zhen-Duan, J., Banks, D.E., Ferreira, C., Zhang, L., Valentino, K., Alegría, M., 2023. Mexican-origin parent and child reported neighborhood factors and youth substance use. Front. Psychiatr. 14, 1241002. https://doi.org/10.3389/fpsyt.2023.1241002.
Zimmerman, G.M., Farrell, A.S., 2013. Gender differences in the effects of parental underestimation of youths' secondary exposure to community violence. J. Youth Adolesc. 42 (10), 1512–1527. https://doi.org/10.1007/s10964-012-9897-x.