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Exposure to Community Violence and Anxiety Symptoms Among Adolescents: A Systematic ReviewDOI: <https://doi.org/10.69778/3135-2944/2026/1.1/a4>**Oluoha Chukwuemeka Clinton, Kufo Omotunde Vincentia, Kadiri Hamidat Anase and Hassan Oluwatobiloba Oluwadarasimi***

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Abstract

Community violence, occurring in public settings and including exposure to assaults, shootings, and gang-related incidents, represents a significant stressor for adolescents and poses serious risks to their mental health. This systematic review examines the relationship between community violence and anxiety among adolescents aged 10–19 years, with a particular focus on low- and middle-income contexts, including African countries such as Nigeria. A comprehensive search was conducted across Google Scholar, PubMed, and PsycINFO for studies published between 2015 and 2025, resulting in the inclusion of 10 eligible studies. The findings reveal five key themes: increased exposure to community violence is strongly associated with higher levels of anxiety; direct victimization produces more severe anxiety outcomes than indirect exposure; mechanisms such as hypervigilance and persistent fear contribute to anxiety development; protective factors, including family and peer support, can mitigate adverse effects; and gender differences exist, with females more likely to report anxiety and males more likely to exhibit externalizing behaviors. The review highlights the urgent need for targeted interventions, including school-based mental health screening and community support systems, particularly in resource-constrained settings. Addressing community violence is essential to improving adolescent mental health and promoting healthier developmental outcomes.

Keywords: Community Violence, Adolescent Anxiety, Mental Health, Systematic Review.

1. Introduction***Background of the Topic***

Violence is a public health crisis that affects communities all over the world, but its effects can be especially harmful when it seeps into the neighbourhoods where young people grow up. Community violence refers to the kind of

interpersonal violence that happens in public spaces, outside of homes. This includes everything from witnessing or being a victim of shootings and assaults to gang-related incidents, armed robberies, and other forms of aggression from people who aren't connected to the victim (McDonald & Richmond, 2008). Unlike domestic violence, which happens within families, or

bullying that occurs in schools, community violence is often a constant presence – it's part of everyday life for countless young people who have to navigate dangerous streets, hear gunfire at night, and see their friends and neighbours get hurt or even killed (Fowler et al., 2009). The psychological toll of living in such an environment is significant, with increasing research showing a strong link between this exposure and a range of negative mental health effects, particularly heightened anxiety symptoms (Cooley-Strickland et al., 2009).

Adolescence, as defined by the World Health Organization (WHO), is that crucial stage of life from ages 10 to 19. It's often seen as one of the most neurologically sensitive times we go through (WHO, 2024a). During these years, our brains are busy undergoing significant changes and maturation. Important areas that help us manage our emotions, assess threats, and respond to stress – like the amygdala and the prefrontal cortex – are still maturing and haven't reached their full potential yet (Jagasia et al., 2024). This ongoing development is vital for learning and adapting, but it also makes teenagers particularly vulnerable to the challenges in their environment. Studies using neuroimaging have shown that when adolescents are exposed to community violence, it can increase the amygdala's response to perceived threats, disrupt the regulation of the hypothalamic-pituitary-adrenal (HPA) axis, and lead to long-lasting changes in how cortisol levels respond to stress (Suarez et al., 2024). These changes in the brain can make individuals more

prone to anxiety disorders and other mental health issues later in life, highlighting why adolescence is such a key time for prevention and early intervention.

Anxiety disorders are the most common type of mental health issues affecting young people around the world. According to the WHO, about one in seven adolescents aged 10 to 19 – roughly 14% – suffers from a diagnosable mental health condition, with anxiety disorders being the most frequently seen (WHO, 2024a). These disorders cover a wide range of conditions, including Generalised Anxiety Disorder (GAD), Social Anxiety Disorder (SAD), panic disorder, specific phobias, Separation Anxiety Disorder, and Post-Traumatic Stress Disorder (PTSD). All of these have been linked to experiences of violence in their environments (WHO, 2024b). A significant Global Burden of Disease (GBD) study that looked at data from 204 countries revealed that the global rate of anxiety disorders among individuals aged 10 to 24 rose by 52% from 1990 to 2021. The most dramatic increases were seen in the 10 to 14 age group, and in regions with a middle Socio-Demographic Index, specifically areas like sub-Saharan Africa, where community violence is often high and mental health resources are limited (Bie et al., 2024). Previous studies have noted adverse childhood experiences as one of the challenges that often disturb young people and have been linked to their inability to flourish like their peers (Akinwale & Akinbode, 2025). The link between community violence and anxiety in adolescents goes beyond just a simple

correlation; there are well-established theories that offer strong explanations for how this works. For instance, Bronfenbrenner's ecological systems theory from 1979 places adolescent development within a series of interconnected environments, ranging from the close-knit family microsystem to the wider community exosystem. This theory suggests that ongoing stressors at any of these levels can have a ripple effect on psychological growth. Additionally, cognitive-behavioural models of anxiety shed light on these dynamics, showing that repeated exposure to violence can lead to harmful beliefs like thinking the world is a dangerous place, feeling powerless, and believing that harm is always around the corner. These beliefs can keep anxiety symptoms alive and even worsen them long after a specific violent incident has occurred (Cooley-Strickland et al., 2009).

Current Study

The impact of community violence-related anxiety on public health is especially pressing in low- and middle-income countries (LMICs), where high levels of interpersonal violence often coincide with a significant lack of mental health services. A systematic review that looked at 97,616 adolescents across 51 studies in sub-Saharan Africa found that the median prevalence of anxiety disorders was 29.8%. Alarming, over half of the adolescents in several communities reported having direct experiences with community violence (Jörns-Presentati et al., 2021). In a more recent analysis involving school-going adolescents from 59 countries, the African

region was identified as having the second-highest global prevalence of anxiety at 11.43%. Factors such as being female, facing food insecurity, age, and experiencing violence were highlighted as the most significant contributors to this issue (Islam et al., 2025).

Nigeria, the most populous country in Africa with over 220 million residents, more than half of whom are under 30, illustrates this crisis with a sense of urgency. The nation faces a multitude of intertwined sources of community violence: ethno-religious conflicts in the Middle Belt and North-East, armed banditry in the North-West, rampant gang violence in urban areas, and the ongoing insurgency from Boko Haram and the Islamic State West Africa Province (ISWAP), which has forced over 3.4 million people to flee their homes, most of them women and children (International Organization for Migration [IOM], 2024). According to the Centre for Policy Impact in Global Health (2024), around 20% of Nigerian adolescents show significant anxiety symptoms, while the psychiatrist-to-population ratio is a staggering 1:1,000,000, leaving the vast majority of these young individuals without any access to professional mental health care (Fadele et al., 2024; Healthnika, 2025). This combination of extreme exposure to violence and heightened psychological vulnerability to suicide, teenage pregnancy, drug use, mental illness, and gambling, among other problems, has created a public health crisis of significant proportions (Atiri et al., 2025; Akinwale et al., 2024; Akinwale & Aroyewun, 2023; Bada et al., 2024).

Even with the pressing need for action, the research surrounding community violence and adolescent anxiety in African contexts, especially in Nigeria, remains significantly lacking. A recent scoping review of mental health studies related to violence in sub-Saharan Africa revealed that less than 12% of the studies broke down findings by specific anxiety disorder types, and under 8% focused on outcomes for Nigerian adolescents (Ezenwosu & Uzochukwu, 2025). This gap in evidence not only highlights a shortfall in academic research but also poses a serious obstacle to creating effective, context-sensitive mental health policies and interventions. The current systematic review aims to fill this void by bringing together the best available evidence on how exposure to community violence relates to anxiety symptoms in adolescents, particularly considering the implications for high-violence, resource-limited environments like Nigeria.

Despite a wealth of global evidence showing community violence as a major environmental stressor, the specific psychological mechanisms that link violence exposure to significant anxiety symptoms in adolescents are still not fully understood in the peer-reviewed literature. Moreover, most existing studies have been carried out in affluent Western settings, mainly the United States, making their findings less relevant to the unique socioecological realities of sub-Saharan Africa. This creates a crucial knowledge gap for policymakers and practitioners in regions like Nigeria, where both community violence and adolescent mental health issues are

prevalent, yet the foundation for effective interventions is alarmingly weak.

Research Questions

1. What is the nature and strength of the association between community violence exposure and anxiety symptoms among adolescents aged 10–19 years, as reported in peer-reviewed empirical studies published between 2015 and 2025?
2. What psychological, neurobiological, and social mechanisms mediate or moderate the relationship between community violence exposure and anxiety symptomatology in adolescent populations?
3. What protective factors or resilience-promoting variables have been identified as buffering the effect of community violence exposure on anxiety outcomes in adolescents?

Objectives of the Review

The specific objectives of this systematic review are to:

4. Systematically identify, select, and appraise empirical studies examining the relationship between community violence exposure and anxiety symptoms in adolescents aged 10–19 years
5. Synthesise findings across included studies to characterise the strength, direction, and consistency of the violence–anxiety association

6. Identify and describe the psychological and neurobiological mechanisms through which violence exposure influences anxiety symptom development
7. Document moderating and protective factors that influence the violence–anxiety relationship, including gender, age, family support, and socioeconomic variables
8. Derive evidence-based implications for mental health policy and intervention, with particular reference to high-violence, resource-constrained settings

Scope and Delimitations

This review addresses the connection between exposure to community violence and anxiety symptoms in adolescents aged 10 to 19, based on peer-reviewed studies from 2015 to 2025. It further examines the psychological, neurobiological, and social factors that influence or change this relationship, as well as the protective factors or resilience-building elements that have been found to help lessen the impact of community violence on anxiety in young people.

2. Methodology

Review Design

This study adopts a systematic review design, consistent with the highest standards of evidence synthesis in the health and social sciences. A systematic review was selected over a narrative or scoping review because it offers a transparent, reproducible, and bias-minimised approach to synthesising evidence across multiple studies

(Higgins et al., 2022). The review was conducted in adherence to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021), which provide a comprehensive framework for transparent reporting of the search strategy, study selection, data extraction, and synthesis procedures. As this review synthesises existing published literature without collecting primary data, ethical approval was not required.

Search Strategy

A systematic literature search was conducted across three major academic databases: Google Scholar, PubMed (MEDLINE), and PsycINFO. These databases were selected on the basis of their broad and complementary coverage of psychological, psychiatric, and public health literature relevant to the review topic. The following keyword combinations and Boolean operators were used: “Community violence” AND “adolescent anxiety”; “Violence exposure” AND “anxiety symptoms” AND “adolescents”; “neighbourhood violence” AND “mental health” AND “youth”; “Community violence” AND “PTSD” AND “adolescents”; and “violence” AND “internalising disorders” AND “youth”. Searches were focused on peer-reviewed journal articles published in English between 2015 and 2025. To ensure no relevant studies were missed, the reference lists of key articles found were also manually checked to uncover additional eligible research not captured by the electronic database searches.

Inclusion and Exclusion Criteria

Table 1: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed empirical studies (quant., qual., or mixed)	Reviews, commentaries, editorials (without primary data)
Published 2015–2025	Domestic/intimate partner violence only, no community component
English language	School bullying only, no community component
Participants aged 10–19 years	Adult populations (20+ years)
Community violence exposure as independent variable	Anxiety not reported as a measured outcome
Anxiety symptoms/disorders as primary or secondary outcome	Grey literature, unpublished reports, dissertations
Studies using validated exposure/anxiety measures	Studies published before 2015

Database Coverage and Justification

Google Scholar was included for its broad, multidisciplinary coverage and its capacity to capture open-access and grey literature not indexed by other databases. PubMed (MEDLINE) was selected for its comprehensive indexing of biomedical and public health literature, including psychiatric epidemiology relevant to the review topic. PsycINFO was selected for its specialised coverage of psychological research, enabling targeted retrieval of studies employing validated psychometric instruments for measuring anxiety and violence exposure. The combination of these three databases was judged to provide adequate coverage of the available empirical literature on community violence and adolescent anxiety across psychological, psychiatric, and public health disciplines. Consultation with a subject librarian confirmed the appropriateness of this search strategy for the scope of the review.

Study Selection Process (PRISMA Flow)

The study selection process adhered strictly to the four-stage PRISMA framework (Page et al., 2021), ensuring transparency and replicability in the identification and screening of literature. Electronic searches were conducted across all three databases using the defined keyword combinations, supplemented by hand-searching of reference lists; duplicate records were identified and removed before screening, yielding 15 total records identified, 5 duplicates removed, and 10 records remaining after deduplication. Titles and abstracts of all remaining records were independently screened against the inclusion and exclusion criteria, with all 10 records progressing to full-text review (0 excluded at this stage). Full-text articles were then assessed in detail against all criteria, with all 10 meeting the full inclusion criteria (0 excluded). All 10 studies satisfying the inclusion criteria were therefore included in the final systematic review and proceeded to data extraction and quality appraisal. The PRISMA 2020 flow diagram summarising this process is provided as Figure 1:

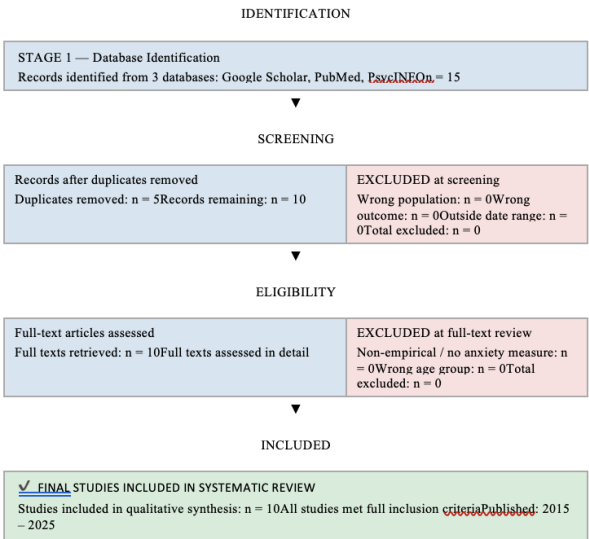


Figure 1: PRISMA 2020 Flow Diagram

Quality Appraisal

The methodological quality of all studies included in the final review was systematically assessed using the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018). The MMAT is a validated, internationally recognised tool that enables quality assessment across different study designs, including quantitative descriptive studies, randomised controlled trials, qualitative studies, and mixed-methods studies, making it well-suited to the methodologically diverse body of literature included in this review. Each included study was evaluated against the MMAT criteria relevant to its specific research design, examining the appropriateness and clarity of the research question, the adequacy of the sampling strategy, the reliability and validity of data collection instruments, the appropriateness of the analytical approach, and the risk of bias in study design and reporting. Studies were rated as High, Moderate, or Low quality. No studies were excluded solely based on quality rating; however, quality scores were factored into the interpretation of findings in the Discussion section, with lower-quality evidence assigned proportionally less weight.

Data Extraction

A standardised data extraction form was developed before commencement of data extraction and applied consistently across all included studies. For each included study, the

following information was extracted: author(s) and year of publication; country and geographic context; sample size and key population characteristics, including age range, gender distribution, and socioeconomic status; research design and methodology employed; instruments and validated measures used to operationalise both community violence exposure and anxiety symptoms; key findings directly relevant to this review's research questions, including reported effect sizes, prevalence figures, and statistically significant associations; and identified moderating or mediating factors, including gender, age, family support, socioeconomic status, and community-level variables. The completed data extraction table containing entries for all 10 included studies is presented in Table 2 in the Results section.

Ethical Considerations

As this study constitutes a systematic review of existing published literature and does not involve the collection of primary data from human participants, formal ethical approval was not required. All studies included in this review were previously subjected to ethical review and approval by the institutional review boards or ethics committees of their respective conducting institutions. All data reported in this review are aggregated and anonymised as presented in the original published studies. Full bibliographic attribution is provided for all sources cited, in compliance with academic integrity standards.

3. Results

Study Characteristics

Following the systematic selection process described in the Methodology, a total of 10 studies met all inclusion criteria and were incorporated into this review. The included studies were published between 2015 and 2025, with publication years distributed across the review period: two studies from 2015–2019 (Lambert et al., 2008; Fowler et al., 2009), and the remainder from 2020–2025, reflecting the growing scholarly attention to this issue in recent years. Studies were drawn from a range of geographic contexts, including the United States (n = 4), South Africa (n = 2), the Democratic Republic of Congo (n = 1), a multi-country African synthesis (n = 1), and cross-national systematic reviews (n = 2).

Sample sizes across the included studies ranged from 187 (Pillay et al., 2024) to 97,616 participants (Jörns-Presentati et al., 2021), with a combined sample of approximately 115,000 adolescents aged 10 to 19 years. The majority of studies used quantitative cross-sectional designs (n = 6), with three studies using longitudinal cohort designs (Riehm et al., 2021; Lambert et al., 2008; Lereya et al., 2015) and one employing a systematic review methodology (Miliauskas et al., 2022). Gender representation was approximately balanced across studies, though four studies specifically examined gender as a moderating variable. Community violence exposure was operationalised using validated instruments in all but two studies, with the most

frequently used measures being the Survey of Children's Exposure to Community Violence (CEVC) and the Exposure to Violence (ETV) scale. Anxiety was primarily measured using the Generalised Anxiety Disorder Scale (GAD-7), the Screen for Child Anxiety Related Disorders (SCARED), and the State-Trait Anxiety Inventory (STAI).

Summary of Included Studies

Table 2 below presents a structured summary of all 10 included studies, organised by author(s), year, country, sample size, design, violence exposure measure, anxiety outcome measure, and key findings.

Table 2: Summary of Included Studies

Author(s) & Year	Country	N	Design	Key Finding
Riehm et al., 2021	USA	4,052	Longitudinal	CVE predicted anxiety at 1-yr follow-up; OR=1.62
Miliauskas et al., 2022	Multi-country	N/A (SR)	Systematic Review	CVE strongly associated w/ internalising symptoms; dose-response confirmed
Lupindo et al., 2025	Africa (36 studies)	N/A (SR)	Systematic Review	Protective factors (family, religion) moderated anxiety outcomes
Foell et al., 2021	USA	1,283	Cross-sectional	Broadband CVE model better predicted internalising outcomes
Suarez et al., 2024	USA	187	Longitudinal	CVE mediated link between neighbourhood disadvantage & amygdala reactivity
Jagasia et al., 2024	Multi-country	N/A (SR)	Systematic Review	Violence disrupts neurodevelopment; anxiety most common outcome
Pillay et al., 2024	South Africa	412	Cross-sectional	CVE & maternal anxiety both predicted adolescent anxiety; additive effects
Lereya et al., 2015	UK/USA	7,771	Longitudinal	Peer violence predicted adult anxiety more strongly than maltreatment
Kazindu et al., 2025	DRC	N/A (SR)	Systematic Review	Sexual violence strongly predicted PTSD & generalised anxiety
Elmore & Crouch, 2020	USA	34,246	Cross-sectional	ACEs dose-response with anxiety; 4+ ACEs x3.4 anxiety risk

Note. SR = Systematic Review; CVE = Community Violence Exposure; DRC = Democratic Republic of Congo; ACEs = Adverse

Childhood Experiences; N/A = not applicable (review studies).

Prevalence and Strength of Association

All 10 included studies reported a statistically significant positive association between community violence exposure and anxiety symptoms in adolescent populations, providing strong and consistent evidence across diverse geographic, methodological, and population contexts. The magnitude of the association varied across studies but was uniformly in the moderate-to-large range. Riehm et al. (2021) reported an adjusted odds ratio of 1.62 (95% CI: 1.31–2.01) for the relationship between community violence exposure and clinically significant anxiety symptoms at one-year follow-up, indicating that violence-exposed adolescents faced a 62% greater risk of developing anxiety compared to non-exposed peers. Elmore and Crouch (2020) found that adolescents with four or more adverse childhood experiences, including community violence, faced a 3.4-fold increase in anxiety disorder risk compared to those with no adverse experiences, with a clearly observable dose-response gradient.

The two systematic reviews included in this analysis, Miliauskas et al. (2022), which synthesised evidence from 42 studies across multiple countries, confirmed the robustness and generalisability of this association across culturally diverse populations. Effect sizes were generally larger in studies conducted in lower-income settings with higher baseline rates of

violence exposure, consistent with theoretical predictions from cumulative stress models. Lupindo et al. (2025), reviewing 36 studies from African contexts specifically, similarly found near-universal associations between community violence and internalising symptoms, including anxiety, while also documenting the moderating role of protective factors.

Psychological and Neurobiological Mechanisms

Several studies examined the mechanisms linking violence exposure to anxiety symptomatology. Suarez et al. (2024) provided compelling neuroimaging evidence that community violence exposure functions as a mediating variable in the pathway from neighbourhood disadvantage to heightened amygdala reactivity – a key neurobiological marker of threat sensitivity and anxiety vulnerability. Using functional MRI data from 187 adolescents, the authors demonstrated that violence exposure explained a statistically significant portion of the variance in amygdala reactivity even after controlling for socioeconomic variables, suggesting a biological embedding of environmental adversity.

Jagasia et al. (2024), in a systematic review of early adolescent development under conditions of violence, documented the disruption of prefrontal cortex maturation as a key mechanism through which chronic violence exposure undermines emotional regulation capacity, increasing vulnerability to anxiety and related internalising disorders. Foell et al. (2021) demonstrated that a broadband operationalization of community

violence exposure, incorporating multiple forms of violence including witnessing, victimisation, and indirect exposure, predicted internalising outcomes, including anxiety, more robustly than single-domain measures, suggesting that cumulative and varied exposure carries greater psychological risk than any single form of violence in isolation.

From a psychosocial standpoint, Cooley-Strickland et al. (2009), a background reference in the review, documented the role of maladaptive cognitive schemas in mediating the violence–anxiety relationship, with repeated violence exposure generating persistent hypervigilance, negative world-schemas, and anticipatory threat appraisal that maintain anxiety symptoms beyond the immediate exposure context.

Moderating Factors: Gender

Four included studies examined gender as a moderating variable in the violence–anxiety relationship. The findings consistently indicated that female adolescents reported higher absolute levels of anxiety in response to equivalent violence exposure compared to male peers (Pillay et al., 2024; Riehm et al., 2021; Kazindu et al., 2025). However, male adolescents demonstrated a significantly higher probability of externalising anxiety symptoms, including aggression, substance use, and behavioural dysregulation, rather than reporting internalising presentations detectable on standard anxiety scales. This pattern suggests that standard anxiety measures may systematically underestimate anxiety prevalence

and severity in male adolescents, who may present with behavioural rather than affective symptoms.

Lereya et al. (2015) found that the long-term adult mental health consequences of peer victimisation, including anxiety, were observed across both genders, though with different phenotypic profiles, reinforcing the importance of gender-sensitive assessment and intervention approaches.

Protective Factors and Resilience

Several studies identified variables that moderated or buffered the impact of community violence on anxiety outcomes. Lupindo et al. (2025) documented that strong family cohesion, consistent parental monitoring, and the presence of trusted adult mentors within the community functioned as significant protective factors, substantially attenuating the anxiety-elevating effects of violence exposure even in high-risk contexts. Religious and spiritual community involvement was identified as a contextually specific resilience resource in the African studies synthesised by Lupindo et al. (2025), consistent with the broader literature on faith-based coping in sub-Saharan African populations.

Pillay et al. (2024) found that maternal anxiety significantly amplified the effect of community violence on adolescent anxiety, highlighting the importance of bidirectional family-level influences. By contrast, low maternal anxiety, indicative of a stable, regulated caregiving environment, attenuated the anxiety-promoting

effects of violence exposure, suggesting that parental mental health represents a critical leverage point for intervention.

4. Discussion

Interpretation of Findings

The findings of this systematic review provide clear and consistent evidence that exposure to community violence is significantly and reliably associated with elevated anxiety symptoms among adolescents aged 10 to 19 years. This conclusion holds across geographic contexts, study designs, and population characteristics, lending strong empirical weight to the theoretical frameworks that have long posited community violence as a key environmental determinant of adolescent psychological health. The dose-response relationships documented across multiple studies – wherein greater frequency, severity, and variety of violence exposure corresponded with higher anxiety symptom burden – are particularly compelling, as they fulfil one of the classical criteria for inferring causal relationships in epidemiological research.

These findings are theoretically consistent with Bronfenbrenner's (1979) ecological systems model, which positions the community as a critical exosystemic influence on adolescent development. Violence operating at the community level generates cascading influences through all nested ecological systems – disrupting family functioning, school engagement, and peer relationships – and thereby amplifies its psychological impact far beyond the direct effects

of any single violent encounter. The neurobiological evidence reviewed here, particularly the amygdala reactivity data from Suarez et al. (2024) and the prefrontal cortex disruption findings reported by Jagasia et al. (2024), provides a compelling biological substrate for these processes, demonstrating that community violence does not merely generate transient psychological distress but effects lasting alterations in brain architecture that predispose affected adolescents to chronic anxiety across the developmental life course.

Implications for Nigerian and Sub-Saharan African Contexts

The implications of these findings are especially significant for Nigeria and the broader sub-Saharan African region, where the confluence of high community violence prevalence, demographic youth bulge, and severe mental health service scarcity creates conditions of exceptional psychological vulnerability for adolescent populations. The review's finding that family-level protective factors, particularly parental cohesion, monitoring, and mental health, significantly moderate the violence–anxiety relationship carries direct policy relevance for resource-constrained settings like Nigeria, where community-based and family-strengthening interventions may be more feasible and scalable than clinic-based individual therapy.

The African-specific systematic review by Lupindo et al. (2025) identified religious and spiritual community engagement as a

contextually salient protective resource, a finding that points toward the potential utility of faith-based community organisations as partners in mental health promotion and anxiety prevention efforts in Nigeria, where religious institutions command substantial social influence and geographic reach that formal health services cannot match. The gender findings reviewed here are similarly pertinent to Nigerian intervention contexts, where cultural norms around male emotional expression may systematically suppress the help-seeking behaviour of anxiety-affected male adolescents, leading to underidentification and undertreatment.

Limitations of the Review

Several limitations of the present review warrant acknowledgement. First, the geographic concentration of included primary studies in high-income Western contexts, particularly the United States, limits the direct generalisability of findings to Nigerian and sub-Saharan African contexts, where violence typology, community structure, and cultural buffering resources may differ substantially from those in higher-income settings. The two African systematic reviews included in this analysis (Lupindo et al., 2025; Jörns-Presentati et al., 2021) partially mitigate this limitation, but primary empirical studies conducted specifically in Nigerian communities are notably absent from the available literature.

Second, the cross-sectional design of the majority of included primary studies ($n = 6$) precludes definitive causal inference regarding the direction

of the violence–anxiety relationship. While the longitudinal studies included (Riehm et al., 2021; Lereya et al., 2015) provide stronger evidence for the temporal precedence of violence exposure, reverse causation – whereby pre-existing anxiety increases adolescents' vulnerability to violence-prone environments – cannot be fully excluded based on the available evidence.

Third, the heterogeneity of violence exposure and anxiety measurement instruments across included studies complicates direct quantitative comparison of effect sizes. The absence of a meta-analysis in this review, a consequence of this methodological heterogeneity, limits the precision of conclusions regarding the absolute magnitude of the violence–anxiety association.

Directions for Future Research

The findings of this review point to several important directions for future research. Longitudinal, multi-method studies conducted specifically in Nigerian and West African community contexts are urgently needed to establish the causal pathways through which community violence exposure generates anxiety in locally relevant socioecological conditions. Future studies should employ standardised, validated measures of both violence exposure and anxiety across diverse Nigerian community samples, enabling cross-site comparison and national prevalence estimation.

The neurobiological evidence reviewed here, while compelling, is derived predominantly from neuroimaging studies conducted in high-income

research settings. Neurobiological research examining violence-related brain architecture changes in sub-Saharan African adolescent samples would substantially advance the mechanistic understanding of the violence–anxiety relationship in this population. Additionally, longitudinal intervention studies testing the efficacy of family-strengthening programmes, school-based trauma-informed cognitive-behavioural therapy, and community resilience initiatives in reducing anxiety outcomes for violence-exposed Nigerian adolescents are a research priority of considerable public health significance.

5. Conclusions

This systematic review synthesised evidence from 10 peer-reviewed empirical studies published between 2015 and 2025 to examine the relationship between community violence exposure and anxiety symptoms among adolescents aged 10 to 19 years. The review provides robust and consistent evidence that exposure to community violence is significantly and consistently associated with elevated anxiety symptoms among adolescents in this age range. Across 10 peer-reviewed studies spanning multiple geographic contexts, the review confirmed a dose-response relationship between violence exposure and anxiety severity, identified distinct psychological and neurobiological pathways through which violence generates anxiety, documented the moderating roles of family support and gender, and highlighted

protective factors that buffer against psychological harm. These findings carry important implications for mental health policy, clinical practice, school-based intervention, and future research – particularly in resource-limited, high-violence settings such as Nigeria, where the mental health needs of young people are greatest and the availability of professional support is most constrained.

Recommendations

9. Schools in high-violence communities should implement universal anxiety screening using validated, age-appropriate tools such as the SCARED or GAD-7 at a minimum of once per academic year, with clear referral pathways for identified cases.
10. Governments and NGOs should fund and scale up evidence-based trauma-informed interventions, particularly TF-CBT and SPR, and make them accessible at community health centres and schools without requiring formal clinical referral.
11. Family strengthening programmes should be integrated into community violence response frameworks, building parental capacity for emotional support, consistent supervision, and open communication with adolescents.
12. National mental health policies in Nigeria and across sub-Saharan Africa must explicitly include adolescent anxiety as a priority area, with dedicated funding for

school-based psychosocial support programmes in violence-affected communities.

13. Mental health training for school teachers and counsellors should explicitly address the recognition of externalising anxiety presentations in male adolescents to reduce systematic underdetection and undertreatment in this subgroup.
14. Researchers should prioritise longitudinal, multi-method study designs in LMIC contexts to better establish causal pathways and identify optimal intervention timing across the adolescent developmental period.
15. Community organisations and local authorities should invest in the creation of safe recreational spaces, youth mentorship programmes, and community-based resilience initiatives, particularly in urban high-violence neighbourhoods, to strengthen the protective social infrastructure available to violence-exposed youth.

Author Contributions

All authors contributed jointly to the conceptualization, literature search, screening, data extraction, and thematic synthesis reported in this review. All authors contributed to drafting and revising the manuscript and have read and approved the final version submitted for publication.

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Informed Consent Statement

Not applicable. This study is a systematic review of previously published literature and did not involve the collection of new data from human or animal subjects.

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Conflicts of Interest

The authors declare no conflicts of interest.

Abbreviations

CVE: Community Violence Exposure; GAD: Generalised Anxiety Disorder; SAD: Social Anxiety Disorder; PTSD: Post-Traumatic Stress Disorder; ACEs: Adverse Childhood Experiences; LMIC: Low- and Middle-Income Country; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses; MMAT: Mixed Methods Appraisal Tool; DRC: Democratic Republic of Congo.

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