



# Trauma and US Minority Children and Youth

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## Abstract

**Purpose of Review** This paper reviews the literature on the prevalence, risk factors, and effects of traumatic experiences on the mental health outcomes of minority youth in the USA.

**Recent Findings** The USA has an increasing number of children and youth from minority backgrounds. Research reveals that traumatic experiences disproportionately affect minority youth. These experiences include historical/generational trauma, immigration and acculturation stressors, natural and manmade disasters, experiences of discrimination, family violence, and community violence. The COVID-19 pandemic has also disproportionately affected minority youth resulting in illness and hospitalizations. Despite the higher incidence of trauma exposure, minority youth are less likely to access medical and mental health care. These disparities are resulting in increasing rates of depression, anxiety, post-traumatic stress, substance use disorders, and suicide in minority youth.

**Summary** Recognizing and understanding the impact of trauma is critical to the healthy development and successful functioning of minority youth, and to the success of our nation.

**Keywords** Minority · Race · Children · Trauma · Disparities · Mental health

## Introduction

The USA has undergone a major increase of non-European populations over the past 50 years. This has been both a result of demographic changes (aging of the non-Hispanic White/European origin populations); greater growth of African American, Latinx, Asian origin, and American Indian populations; and significant immigration from Latin America, Southeast and East Asia, the Middle East, and Africa. As of 2020, the majority of children and youth in the USA are from these minority, non-European backgrounds (this will be the case for the overall population by 2045) [1]. These populations face higher rates of psychosocial disparities such as poverty, lack of education, barriers

to health and mental health services, and exposure to multiple stressors such as discrimination, racism, community violence exposure, and immigration and acculturation stresses. These composite stressors are resulting in increasing rates of mental health morbidity, such as depression, suicidality, stress-related disorders, school disciplinary actions, incarceration, and placement in state custody. At the same time, the children's mental health service system in the USA is a largely fragmented system geared to middle class Caucasian norms of family independence and self-sufficiency. In spite of some efforts, this system lacks the necessary skills and capacity to address the special cultural and psychosocial needs of growing minority populations [1–3].

To date, there has been no review of the literature examining the outcomes of multiple adverse experiences faced by minority youth including the development of trauma- and stressor-related disorders. The purpose of this review is to outline the literature in this important area and to inform service providers and policy makers in their efforts to address the needs of children and youth from minority and Black, Indigenous, and People of Color (BIPOC) backgrounds. We review overall studies around traumatization, historical trauma, and studies associated with specific types of traumatic experiences commonly

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experienced by minority children and youth: immigration trauma, community violence, child abuse/family violence, terrorism, disasters, and more recently the COVID-19 pandemic.

## Overall Prevalence and Risk Factors

The overall impression from the available literature is that the prevalence of traumatization and trauma-related disorders among youth from minority or BIPOC backgrounds is substantial and possibly higher than that found among those from White or European background populations. There are no epidemiological studies of the overall prevalence of post-traumatic stress disorder (PTSD) among minority or BIPOC children and youth. Alegria et al. [4], studying a nationally representative US sample of non-Latino White, Latino, Asian, African American, and Afro-Caribbean adults, demonstrated that Asians have lower prevalence rates of probable lifetime PTSD, whereas African Americans have higher rates as compared with non-Latino Whites, adjusting for type and number of exposures to traumatic events, and for sociodemographic and clinical factors. Roberts et al. [5], analyzing data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), found that the lifetime prevalence of PTSD in adults was the highest among Blacks (8.7%), followed by Whites (7.4%), Hispanics (7.0%), and the lowest among Asians (4.0%), with differences in risk varying by type of traumatic event.

Studies among children are fewer so far but suggestive of similar results. Elkins et al. [6••] used data from the National Comorbidity Survey-Adolescent Supplement (NCS-A), a nationally representative adolescent sample ( $N = 10,123$ ) to examine the impact of race/ethnicity on the association between adverse childhood experiences (ACEs) and PTSD in the USA. They found that race/ethnicity moderates the association between ACEs and PTSD. Although higher ACE scores increased the probability of lifetime PTSD across non-Hispanic White, Black, and Hispanic adolescents, non-Hispanic White adolescents presented with a much higher probability of lifetime PTSD compared to their Hispanic and Black peers.

Studies involving minority children and youth have primarily focused on risk factors associated with traumatization. Assari [7] analyzed data from 4696 non-Hispanic White and non-Hispanic Black children ages 8 to 11 years old who were participants in the Adolescent Brain Cognitive Development (ABCD) study. The primary outcome was the exposure to 1 or 2+ childhood traumas, measured by the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS) semi-structured interview, and the independent variables were parental educational attainment and family income. He found that race/ethnicity showed statistically

significant interactions with parental education and family income on exposure to childhood trauma, indicating weaker protective effects of parental education and family income on reducing exposure to trauma for non-Hispanic Black compared to non-Hispanic White children. Larson et al. [8] reviewed empirical studies between 2003 and 2013 of US pediatric populations and of US school behavioral health centers. Some studies suggested higher psychopathology and lower academic performance among minority children experiencing trauma. Andrews et al. [9] investigated ethnic differences in trauma-related mental health symptoms among adolescents, and the mediating and moderating effects of poly-victimization (PV) using data from the first wave of the National Survey of Adolescents-Replication (NSA-R) study. Non-Hispanic Black and Hispanic adolescents reported higher levels of PV and trauma-related mental health symptoms (symptoms of posttraumatic stress and depression) compared to non-Hispanic Whites, though the effect sizes were small ( $\gamma \leq 0.07$ ). PV fully accounted for the differences in mental health symptoms between non-Hispanic Black and non-Hispanic White adolescents, and partially accounted for the differences between Hispanic and non-Hispanic White adolescents. Milan et al. [10] in a prospective study of 1242 diverse adolescents examining risk factors for onset of PTSD versus risk factors for symptom development found that racial/ethnic differences were evident in both the likelihood for exposure to violence and the likelihood of PTSD. Recent violence was more common among African American youth (57%) compared to adolescents who identified as Latino (43%), White (33%), or other racial/ethnic groups (33%). In contrast, among those who experienced violence, African American adolescents had lower rates of PTSD (2%) than Latino (5%) and White (8%) adolescents. Oransky and Hahn [11] examined the role of poor caregiver-youth agreement regarding youths' exposures to potentially traumatic events as a risk factor for PTSD and mood symptoms. The predominantly female sample was racially/ethnically diverse (86.8% female, 13.2% male, 32.5% African American, 54.4% Latino/a, 2.6% Caucasian, 0.9% Asian American, and 8.8% other race/ethnicity). They found that overall caregiver-youth discrepancies regarding youths' histories of exposures to potentially traumatic events and caregiver PTSD symptoms were significantly associated with youths' self-reported symptoms and functional impairment. Espinoza and Wright [12••] reviewed eight papers for a special issue on cyberbullying among marginalized youth, including ethnic minority youth, and they concluded that cyberbullying was a growing risk factor for traumatization, in spite of the "digital divide," but that physical bullying was still more prevalent and some factors were protective, such as friendship support among Latinos.

Various studies focused on the role of substance use as a risk factor associated with traumatization among minority youth. Chasser [13] examined the role of age, gender, and minority status in a sample of diverse youth in treatment for substance use disorders. She found that substance dependent youth with comorbid PTSD were significantly more likely to be female and Latino. Park et al. [14] examined risk factors among college students that prospectively predicted exposure to potentially traumatic events (PTE) over a 2-month period. They found that subsequent PTE exposure was predicted by higher previous PTEs and binge drinking and was somewhat higher in ethnic minority students. Sartor et al. [15] examined the relationship between childhood trauma and alcohol use initiation in Black and White adolescent girls. They found that childhood trauma was more prevalent (29.0 vs. 17.5%) and alcohol use initiation less prevalent (37.7 vs. 54.4%) in Black vs. White girls but found no evidence for differences in risk conferred by trauma. Results indicate that low socioeconomic status (SES) and neighborhood factors (such as safety, community cohesion, and physical appearance of the neighborhood) contribute to the associations of childhood trauma and race with alcohol use initiation, though race is still a significant risk independent factor. Porche et al. [16] used data from the Collaborative Psychiatric Epidemiology Surveys, a nationally representative probability sample of African Americans, Afro-Caribbeans, Asians, Latinos, and non-Latino White young adults ages 21–29. They found that childhood substance and conduct disorders mediated the relation between trauma and school dropout, with the likelihood of dropout decreased for Asians, and increased for African Americans and Latinos, compared to non-Latino Whites as a function of psychiatric disorders and trauma.

## Historical Trauma

Historical trauma refers to the cumulative experiences of emotional and psychological wounding in an individual. Intergenerational trauma is historical trauma that spans multiple generations and affects communities and their descendants. In examining current traumatic stressors, it is essential to review how historical and intergenerational mass trauma currently contributes to the vulnerabilities and unique needs of US minority youth. This can be identified in all American BIPOC populations.

Native Americans have experienced genocide and forced assimilation since the infancy of the USA. Native Americans report the greatest average number and variety of ACEs and the highest rates of physical abuse, sexual abuse, parental substance abuse, and witnessing violence than persons from any other racial/ethnic group [17]. Among US youth between ages 15 and 24, American Indians or Alaska

Natives have the highest suicide [18]. Despite confounding factors such as income, social support, and access and utilization of mental health services both preceding and during the COVID-19 pandemic, historical trauma is known to be a major predictor of psychological stress among Native Americans [19].

African Americans have experienced slavery and still continue to experience racial discrimination. The historical context of enslaved Black mothers being separated from their infants and being forced to breastfeed their owners' children is a contributing factor for present day Black women's decision to not breastfeed their babies [20]. This remains a significant finding even after controlling for demographic and social support risk [21]. Structural racism (a system in which public policies and institutional practices reinforce racial inequities) and historical marginalization are among several reasons that African American children are overrepresented by 2–3 times in the foster care system [22] and are more likely to have been exposed to a greater number of trauma types and community violence than White children [23]. Black mothers not only worry about the racial inequality and unfair treatment of their children, but especially fear that their sons will be killed doing everyday activities such as driving through a neighborhood or wearing a hoodie simply because they are Black [24]. These fears are likely based on both historical trauma and the recent violence against Black men that has received significant media attention. The historical marginalization of African Americans contributes to health inequities, such as lack of safe transportation among injured Black pedestrians leading to higher hospitalization rates compared to injured White pedestrians [25]. History of being subjected to unethical clinical studies, such as the Tuskegee study, has contributed to the African American youth's mistrust of the government and the healthcare system which results in low influenza vaccination rates [26], COVID-19 vaccination hesitancy [27], and higher susceptibility to dying from COVID-19 than other racial groups [28].

Asian-American minorities have experienced various types of mass traumas, such as colonialization of Philippines by the USA from 1880s through 1940s, the ban on immigration of people from China in late 1880s, restrictions on Chinese from testifying in an American court of law in 1850s, the internment of persons of Japanese ancestry in 1940s, the influx of Vietnamese refugees after the Vietnam war in 1970s and 1980s, and surge of individuals who came to the USA as "mail-order brides" or through adoption. The term "Asian-American" is both inclusive and exclusive in that heterogeneous groups of people are classified together as "Asian American" without attention to their distinct cultures and ethnicities, while people from certain countries in Asia (such as India, Pakistan, and Bangladesh) are often not included in the Asian American group based on physical characteristics. While some minorities have struggled with

the stereotype of being disadvantaged and oppressed, Asian-Americans have the unique burden of being labeled a “model minority.” This burden, with other cultural factors, contributes to the underutilization of mental health services among Asian-Americans even after controlling for the perception of needing psychiatric treatment [29, 30]. Since the onset of the COVID-19 pandemic, 71% Asian-American youth perceived health-related Sinophobia [31]. Asian-American youth and college students have reported experiencing more xenophobia and COVID-19-related discrimination compared to non-Hispanic White youth [32]. A survey of Asian-Americans that included both adults and children ages 12 and older showed that 46% of them could not find a place to get tested for COVID-19 and 70% avoided leaving their home to go to public places due to fear of race-based hostility [33].

Latinos have experienced intergenerational mass trauma going back to the conquest of indigenous civilizations by Europeans, and more recently fleeing political, sexual, and gang violence and economic disruptions in their countries of origin before immigration to the USA. Immigration itself is experienced as traumatic by many Latinx youth in the USA [34]. For unaccompanied migrant youth, it is further complicated by separation from their caregivers [35] which interferes with their healthy identity formation [36••]. The Office of Inspector General Report from 2019 expressed concerns about the living conditions of detained youth including serious overcrowding, prolonged detention, and poor physical and unhygienic conditions [37, 38]. Tynes et al. [39••] found that Latinx youth who viewed viral videos of undocumented immigrants of their own ethnicity detained in cages experienced increased depressive symptoms. Documented Latinx children still remain vulnerable due to economic disadvantage. For example, among hired child farmworkers in the USA, Latinx children were found to be at high risk for exploitation [40] and more likely to experience work injuries and heat-related illness [41].

## Specific Traumatic Stressors

### Immigration Trauma

There has been strong consensus for some time that children and youth entering the USA as refugees and migrants were at elevated risk for adverse mental health outcomes as a result of traumatic exposures during their journey and entry.

Potochnick and Perreira [42] examined data from the Latino Adolescent Migration, Health, and Adaptation (LAMHA) study, which surveyed 281 first-generation Latino immigrant youth, ages 12–19. Among first-generation Latino adolescents, they found nearly 7% were symptomatic for depression and 29% were symptomatic for anxiety. Females were slightly more likely to have symptoms of depression

but less likely to have symptoms of anxiety. Using logistic regression, they found that migration stressors increased the risk of both depressive symptoms and anxiety, while time in the USA and support from family and teachers reduced their risk. Compared to documented adolescents, undocumented adolescents were at greater risk of anxiety, and children in mixed-status families were at greater risk of anxiety and depressive symptoms. Clary et al. [43] examined the association of pre, during, and post immigration trauma experiences and mental health outcomes in a sample of immigrant Central American youth. They studied a convenience sample ( $n = 104$ ) of Latino youth aged 12–17 years old in the USA for 3 or fewer years. Two-thirds of youth experienced at least one traumatic event, 44% experienced an event once, and 23% experienced two or more traumatic events during migration. Trauma experienced at different migration stages was associated with anxiety, PTSD, and depression. Berger Cardoso [44] reported a study with a convenience sample of Central American immigrant children and youth suggesting roughly 60% of unaccompanied migrant youth met the criteria for PTSD, 30% a depressive disorder, and 30% reported suicidal ideation in the past year. Despite these findings, Loria and Caughy [45], examining ACEs among first, second, and third generation migrant Latino children, found that Latino migrant children had a lower prevalence of 2 or more ACEs (13%;  $n = 801$ ) compared with nonimmigrant Latino children (40%;  $n = 772$ ), with prevalence of exposure to ACEs the highest among third- or higher-generation non-immigrant children and the lowest among second-generation migrant children.

Some studies have focused on the impact of maternal traumatization related to immigration on their offspring. For example, East et al. [46] studied the impact of maternal traumatization on offspring in 198 Somali immigrant mothers who experienced significant trauma while spending an average of 7 years in refugee camps. There was no direct association between trauma experienced by the mother and their children’s well-being, but mothers’ posttraumatic stress and depressive symptoms significantly mediated the effects of mothers’ past torture on their children’s adjustment, a pattern indicative of intergenerational traumatization.

More recently, the crisis of unaccompanied minors along the USA-Mexico border has been a major focus of work on immigration trauma. Berger Cardoso et al. [47] outlined how from 2013 to 2016 the USA placed over 123,000 unaccompanied migrant youth—predominantly from Central America—with a parent or other adult sponsor residing in the USA. Following placement, local communities are tasked with integrating migrant youth, many of whom experience pre- and in-transit migration traumas, family separation, limited/interrupted schooling, and unauthorized legal status, placing them at heightened risk for psychological distress, academic disengagement, maltreatment, and human trafficking. However,

fewer than 10% of young people receive formal post-release services. Their paper addresses the paucity of research on the experiences of the 90% of children and youth without access to post-release services and their service needs and proposes research to identify structural challenges to the provision of services and to inform best practices in support of unaccompanied youth. Other conceptual papers [48–51] have also focused on the ethical, developmental, and potential clinical adverse outcomes from unaccompanied child immigration, how US government policies have aggravated these adverse outcomes, approaches to services provision, and the need for more research and services outreach to this vulnerable population.

## Community Violence

The current literature shows that BIPOC/minority children in the USA are more likely to be exposed to greater amounts of various types of violence over their lifetimes compared to non-Hispanic Whites [52]. These types of violence reported by youths are also called polyvictimization. These traumatic events could be from community violence, exposure to crime, police violence/abuse, school shootings, and natural disasters. A recent review article has identified several pathways linking natural disasters and violence against children worldwide [53].

Community violence has disproportionately affected minority communities. Black youths are at higher risks of being exposed to higher amounts of adverse childhood experiences as well as physically harmful forms of violence [54]. Racial and ethnic differences in exposure to violence appear to broaden across adolescence, and neighborhood/familial environment play a part in triggers that give rise to the disparities in violence exposure [55••]. Minority youths are not only likely to witness more violence but they are also more likely to face more barriers to care and receive low-quality care [56]. One recent study examining the treatment modalities used in community mental health settings to treat youths exposed to violence found that Black children are more likely to receive non-evidence-based treatments [57].

Increased community violence also means more exposure to police and the trauma that comes from police violence. Black girls are found to experience up to 4.3 times the injury from law enforcement compared to White girls in an analysis of California ER visits and hospitalizations [58]. Recent police killings of unarmed Black Americans are found to have a negative impact on mental health among Black Americans [59]. Viewing distressing news, such as police killings, affecting members of one's own racial or ethnic group is associated with higher levels of depressive and PTSD symptoms [39••]. Subjective religiosity, measured by self-reported importance of religion in life and importance of prayer in stressful situations, is a protective

factor in depressive symptoms from police abuse of Black Americans [60].

Yet another violent event that is widely publicized in the USA is school mass shootings. By its nature, school shootings occur where most victims are children and adolescents. Decreased sense of safety and increased absenteeism were found in students who attended a school in close proximity to a school that had a mass shooting [61]. Black youths who are concerned about violence at their school were more likely to have depressive symptoms [62]. While current literature outlines the importance of knowing risk and protective factors for better outcomes of the survivors [63], there is a lack of published data on how or if school shootings affect minority youths differently than White youths.

## Child Abuse and Family Violence

Children of ethnic and racial minorities are exposed to higher rates of violence and experience a greater number of adverse childhood events compared to White children. Furthermore, minority populations are overrepresented in child protective services compared to their presence in the population [64]. Multicultural, Native American, and African American children are all more likely than White children to be removed from their home by Child Protective Services [64]. Several studies highlight the increased adversity experienced by children of color, the decreased opportunities they are afforded, and how this impacts them as adults [65–68].

Research shows that exposure to violence and other adverse events in childhood causes downstream consequences that last well into adulthood [67–77]. For example, children who are exposed to more violence often experience higher rates of poverty, physical and mental health issues, and have higher rates of incarceration as adults [65, 69, 72, 73]. Furthermore, the types of stressors and adverse childhood events differ across races [67]. Overall, White children reportedly experience the least amount of violence and adverse events [67]. African American children experience the most adverse events, including a parent death, a parent serving time in jail, exposure to domestic violence, and witnessing violence in the neighborhood [67]. Powers et al. studying a sample of highly traumatized minority youth, found that children who experience child abuse are more likely to develop psychotic disorders and depressive disorders, and if they developed PTSD from exposure to family violence the risk of developing a psychotic disorder further increases [74••]. Interestingly, several papers highlight that minority children, mainly African American and Latino children, are less likely to develop PTSD if exposed to multiple episodes of family violence [75]. Some researchers believe this is due to inherent resilience within those cultures, though under-identification of PTSD in these populations

could be a factor [75]. Though family violence is prevalent in most if not all cultures, some cultural groups may have greater societal acceptance [76].

### Natural Disasters and Trauma

The number of children who are affected by natural disasters can be expected to rise as the frequency of natural disasters is expected to increase due to climate changes. Mental health impact of these disasters have in children is reflected in post-traumatic stress symptoms as well as depression and anxiety. Overall, there is a lack of understanding if cultural differences and social support impact children after a natural disaster. A review by Cerna-Turoff et al. [53] found no consistent association between violence against children and natural disasters which underscores need for further research on how natural disasters affect human populations.

Recent survey of Puerto Rican youths after Hurricane Maria revealed significant prevalence of disaster-related stressors and high levels of PTSD and depression symptoms [78]. Hurricane Katrina was another natural disaster that disproportionately affected minority/BIPOC children. One study by Lai et al. [78] examined the relationship between the post-traumatic stress symptoms among youth and social support after natural disasters. They followed patients from 3–7 months after Hurricane Katrina until 25–27 months after the event and determined that post-traumatic stress symptoms undermine social support. Those who had higher symptoms of post-traumatic stress were less likely to seek supportive relationships and/or perceive less support is available. Utilization of mental health services also appeared to be affected by hurricane Katrina. While encounters stayed the same, medication utilization for children displaced by hurricane Katrina went down, suggesting logistical obstacles in obtaining or utilizing medical services [79]. Another study viewing long-term mental health consequences of Hurricane Katrina found that exposure to hurricane-related trauma is correlated to co-occurring psychological distress 12 years after the event [80]. Lai et al. [81••], in a study of the trajectories of post-traumatic stress in youth after natural disasters, studied combined data from Hurricanes Andrew, Charley, Ike, and Katrina. They found that racial/ethnic minority youth had higher odds than non-minority youth of having a pattern of slower rate of decrease in post-traumatic stress symptoms, indicating longer lasting adverse mental health effects.

### Terrorism and Trauma

Although all children are affected to varying degrees by acts of terrorism, youths from minority groups face specific challenges. For example, post September 11, 2001, half of Arab American adults surveyed across 35 states reported

depression and a quarter of them reported moderate to high anxiety [82]. Based on many studies of the impact of parental mental health on children, it is reasonable to extrapolate that Arab American youth were also likely to experience mental health problems like their adult family members. Indeed, a retrospective study by Gargano et al. [83] showed that among children exposed to the 9/11 dust cloud, those of racial minority backgrounds were more likely to be hospitalized due to 9/11-related symptoms. A study by Becker-Blease et al. [84] showed that among a national representative sample of children aged 2–17, youth who identified as Black, Hispanic, and non-White endorsed more worrying following sniper shootings and kidnappings of 2002 than did their non-Hispanic White peers.

### Impact of the COVID-19 Pandemic on Minority Children

A growing literature has addressed the demographic, social, and economic conditions that increase risk for negative outcomes for minority children in the context of the COVID-19 pandemic. These include poverty, food insecurity, detrimental living situations (e.g., homelessness, crowded living environments, and inadequate sanitation), congregate housing, front line worker exposure, pre-existing and comorbid medical and mental health problems, physical and cognitive disabilities, and disparities in access to social support and medical and mental health care. Indeed, compared to their White counterparts, Black, Hispanic, and Asian children are less likely to be tested for COVID-19 [85], even though death and hospitalization rates in general and for children have been the highest in BIPOC populations [86, 87]. Pfefferbaum, in her recent review of the children's reactions to the COVID-19 pandemic [88], pointed out that many of the psychosocial vulnerabilities overlap with racial/ethnic disparities, and further increased risk and affect access to services for racial/ethnic minority children.

One possible source of increased traumatization for BIPOC children is from reported increases in child abuse and domestic violence associated with increased economic stressors from the pandemic [89••, 90]. Farquharson and Thornton [90] also posited possible intergenerational traumatization for BIPOC children from pandemic experiences of loss and social isolation. Claypool and Moore de Peralta [91] posited how ACEs resulting from the pandemic have compounded the toxic stress resulting from pre-existing ACEs, leading to disproportionate harm to Latino children and communities, especially in their future development. Spencer et al. [92••] have one of the few population-based studies of the impact of psychosocial function in minority children resulting from the pandemic, finding a dramatic increase in depression, anxiety and social risks among urban, and racial and ethnic minority school-age children

compared to before the pandemic, although mental health symptoms correlated more to pre-pandemic social risks.

## Conclusions

Investigating and understanding the impact of trauma among children of minority/BIPOC populations is critical given their growing numbers in the USA. The mental health and successful function of minority youth is vital to the success of our nation.

All the different areas covered in this review need further research. There is also a need for additional research on interventions and prevention of traumatic stress in this population, which are not covered in this paper. Perhaps the most pivotal area for further research is on the impact of cumulative traumatic stress and historical trauma on minority/BIPOC children and families, which is critical for prevention efforts. In recent years, we are more clearly focusing on indicators of the adverse impact of cumulative and historical trauma. One of these indicators is the close relationship between structural racism and cumulative psychosocial disadvantages resulting in increasing traumatic stress. There are possible neurobiological outcomes and consequences that investigators are starting to focus on. These include studies on the impact of discrimination/racism and general health, such as various recent studies examining the relationship between telomere length (a chromosomal measure of life longevity) and cumulative exposure to discrimination [93••, 94]. Another related area of study is the rising rates of suicidality in Black youth, which has been highlighted as a crisis and a research priority by the Congressional Black Caucus of the US Congress [95••, 96]. An additional finding in epidemiological and clinical studies that warrants close re-examination is the higher rate of psychosis in African Americans than other groups, which could be potentially related to chronic and traumatic stress. Research has traditionally pointed to clinician diagnostic bias as the main factor behind this finding. However, two other hypotheses are now being entertained: one of psychosis as an idiom distress related to traumatization among minority populations and the other being that these higher rates of psychosis point to the cumulative impact of traumatic stress through epigenetic processes [74••, 97, 98••].

Insofar as intervention and services research related to traumatic stress in minority populations of children, there is increasing emphasis on disparities in services utilization, and on culturally acceptable and effective services, which tend to be more multi-modal and multi-disciplinary along the lines of community systems of care philosophy. Systems of care programs have been able to demonstrate positive impacts on services disparities as well as effectiveness in addressing suicide and trauma [99, 100].

Above all, it is important that such research follow principles of cultural humility, including involvement by the minority populations being studied, as well as being informed by the lived experiences of investigators from these populations. A common motto among minority and BIPOC populations is that of “nothing about us without us,” and it would behoove investigators to honor the intent of this motto.

## Declarations

**Conflict of Interest** The authors declare no competing interests.

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Papers of particular interest, published recently, have been highlighted as:

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