



# Assessing the Impact of Racial Trauma in School Children

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## Abstract

The death of George Floyd in May 2020 heightened awareness of racial trauma, particularly among African American communities, and underscored the need for schools to address its psychological and academic effects on students of color. This study examines the impact of racial trauma on children in schools, explores its effects on mental health and academic performance, and evaluates culturally sensitive assessment tools such as the Race-Related Events Scale. The findings indicate that racial trauma significantly harms children's mental well-being and academic success, emphasizing the need for reliable assessments to guide mental health professionals in providing practical support.

**Keywords:** racial trauma, assessment methods, school children, children of color, discrimination, culturally sensitive assessment, epigenetics, historical trauma

## 1. Introduction

On May 25, 2020, in Minneapolis, Minnesota, George Floyd, an African American man, died while in police custody, sparking global outrage over systemic racism and law enforcement practices. The incident was videotaped by Darnella Frazier, a 17-year-old bystander, who brought international attention to the event through social media. The involvement of a young person underscores the significant psychological impact such events can have on this population, particularly those who witness or experience systemic racism firsthand. This event prompted protests in the US, and the Black Lives Matter movement arose, pushing for racial justice for unarmed African American men killed by police. The protests spread to other countries, including Brazil, where protesters took to the streets to demand justice for a 14-year-old Black teenager who was killed by Brazilian police (Weine et al., 2020). In Europe, protests started in Amsterdam and London, and in solidarity with the US, Australians rallied for their own "Aboriginal Lives Matter" movement. People started calling for an end to social injustice, race-based violence, and institutionalized racism (Weine et al., 2020).

Previous research has shown that racial trauma significantly impacts students' mental health and academic performance, pointing to the need for culturally responsive support in schools. The term *race-based traumatic stress* was first introduced by Dr. Robert T. Carter (Carter, 2007). Dr. Carter noted that racial discrimination may be a psychological injury (Carter, 2007),

while Comas-Díaz et al. (2019) highlight its lasting emotional effects. Benner and Wang (2018) further link racial discrimination in adolescence to academic decline, stressing the necessity of early intervention. To address these challenges, Williams et al. (2018) promote race-specific assessments like the UConn Racial/Ethnic Stress & Trauma Survey, while Neblett et al. (2012) emphasize the role of racial identity and protective factors in school-based interventions.

The present research is based on a theoretical review of racial trauma, inherited historical trauma, and several assessment tools that are available to help students of color. As the literature indicates, the existing culturally sensitive assessment tools can provide a clearer understanding of the effects of racial trauma on the mental health and academic performance of school children of color.

### **1.1 The Rise of Racial Trauma**

Carter and other researchers (see, e.g., Bryant-Davis & Ocampo, 2005) recognized that *racial trauma* can lead to mental health concerns. The shortened term racial trauma was used globally by the media to describe the impact of George Floyd's death. Racial trauma was also discussed in schools and among the African American community in the US. Floyd's death shone a light on the urgency of assessing and addressing the racial trauma experienced by students of color. This awareness led mental health providers around the world and the US to encourage discussions on racial trauma and its lasting effects. Mental health professionals sought to determine the psychological effects of perceived racial discrimination on African American children at school and how they impact their academic and emotional development.

### **1.2 Historical Context and the Global Impact of Racial Trauma**

Over the past decades, there has been a broad discussion among the general population worldwide on the impact of colonization on society (Weine et al., 2020). Examining the effects of colonization helps deepen our understanding of racial trauma among community members. For example, Jamaican psychiatrist Fredrick Hickling campaigned for anti-colonialism in the mental health field, seeking to improve his clients' understanding of how colonization has impacted mental health for centuries (Weine et al., 2020). Colonization has engendered racial trauma over generations, in a phenomenon described as *historical trauma*. Historical trauma is defined by past experiences that have affected a specific race, causing mental health issues across generations (Rogers & Bryant-Davis, 2022).

## **2. Methods**

This study relied on a systematic review of various culturally sensitive assessment tools for identifying and helping children of color affected by racial trauma. The study also reviewed the impact of racial trauma on children of color as well as the associated effects on mental health and academic performance. A comprehensive literature search was conducted using PubMed, PsycINFO, and Google Scholar. Our keywords included "racial trauma," "children of color," "mental health," "academic performance," "discrimination," "culturally sensitive assessment," "assessment methods," "school children," "epigenetics," and "historical trauma." The search was limited to studies published between 1995 and 2023 to ensure relevance to contemporary contexts. Over 200 articles, including peer-reviewed articles and case studies, were identified and screened for pertinence based on their titles and abstracts. The full-text articles were then reviewed against strict inclusion and exclusion criteria. Our inclusion criteria were as follows: empirical studies focusing on children aged 5–18 years, published in English, addressing the mental health and academic impacts of racial trauma, and conducted in the US. Our exclusion criteria were: studies not focusing on children of color, not empirical, opinion

pieces, and lacking rigorous methodological frameworks. Each selected study was also evaluated for methodological rigor using standardized quality assessment tools, namely, the Cochrane Risk of Bias (RoB 2) tool, A Measurement Tool to Assess Systematic Reviews (AMSTAR), the Newcastle-Ottawa Scale (NOS), the Joanna Briggs Institute (JBI) tool, and the Critical Appraisal Skills Program (CASP), to ensure the inclusion of high-quality research. Furthermore, we defined inclusion and exclusion parameters for the assessment tools. The inclusion criteria were as follows: tools that are evidence-based, validated for use with diverse populations, and designed to assess racial trauma related to mental health in school children. The exclusion criteria were: tools that are not culturally sensitive and/or do not focus on racial trauma.

The selected assessment tools were tested through qualitative and quantitative analyses, ensuring a comprehensive evaluation of their reliability, validity, and practicality in educational environments. These tools were specifically designed to address the complexity of the racial trauma experienced by students. By employing this approach, we established a framework for understanding the impacts of racial trauma on school-aged children of color while assessing the effectiveness of various assessment tools in capturing these experiences (Table 1). The proposed culturally sensitive assessment tools were developed for implementation in various settings, including schools, mental health facilities, and even community service centers, and aim to identify the unique racial trauma experiences of children of color. Additionally, the objective of each assessment is to assess and address the psychological and academic challenges experienced by these children and inform decisions about targeted interventions and support.

### **3. Results**

#### **3.1 Assessment Tools**

The professional identification of historical trauma has had a global impact on teaching and opened up further research opportunities regarding how to assess racial trauma, especially in schools (Weine et al., 2020). Some tools, such as the Psychological Reaction to Racism and Coping and the UCONN Racial/Ethnic Stress & Trauma Scale, were developed to assess the effects of racism and racial trauma. Their application and usage within the educational community remain limited, and more mental health professionals should apply them to help students who are or have been exposed to systemic racism (Jones, 2020).

The American Psychological Association (APA) Presidential Task Force on Traumatic Stress Disorder and Trauma in Children and Adolescents (2008) contends that discrimination and poverty contribute to trauma in children of color throughout their lives. According to research by Jernigan and Daniel (2011), “membership in a racial and ethnic group can influence perception, impact, and recovery when one has experienced trauma” (p. 125). African American children are vulnerable and tend to experience racism as early as elementary school, and this continues into high school (Henderson et al., 2019). A study by Henderson et al. (2019) demonstrated that when children perceive racial discrimination from teachers, they can experience depression, low levels of motivation, and feelings of alienation. African American children are also more likely to have conversations about race than White children, and the disparity was especially salient after the George Floyd incident (Sullivan et al., 2021). For example, a study showed that African American parents had more conversations about race with their children following the incident (Sullivan et al., 2021).

Table 1 provides an overview of the race-related assessment tools included in the study, highlighting how they can be used to assess the impact of racism and race-based stress on

children, adolescents, and young adults. The table details the purpose, target population, format, and unique features of each assessment tool. These tools were all designed to support cultural sensitivity and evidence-based approaches to assessing racial trauma.

Table 1. Race-Related Assessment Tools for Racial Trauma

Assessment Tool	Purpose	Target Population	Format	Validity and Reliability	Key Features
Race-Related Events Scale	Measures exposure to race-related stressors	Children and adolescents	Self-report survey	High	Focuses on specific incidents of racial discrimination and their impact
Perceptions of Racism in Children and Youth	Examines children’s perceptions of racism and its effects	Children and adolescents	Questionnaire	Moderate to high	Assesses awareness of and emotional responses to racism
Perceptions of Racism in Adolescents and Young Adults	Measures perceived racism in older young people	Adolescents and young adults	Self-report survey	Moderate to high	Tailored for older young people; addresses systemic and individual racism
Race-Based Traumatic Stress Symptoms Scale	Assesses symptoms of trauma related to racial stress	Diverse populations	Self-report survey	High	Measures emotional and physiological responses to racial trauma
Unexplored Racial Experiences and Stress Symptoms Survey	Evaluates unexplored racial experiences and stress symptoms	Adolescents and adults	Questionnaire	Moderate	Includes exploratory items and focuses on uncovering latent racial stressors

### 3.2 Racial Trauma and its Effects on Mental Health and Well-being

Racial trauma, also known as *race-based traumatic stress* (RBTS), refers to the psychological and emotional harm caused by experiences of racism and discrimination. Racial trauma may result from overt acts of racial violence, systemic oppression, microaggressions, and chronic stress associated with membership in a marginalized racial or ethnic group. RBTS-inducing experiences include hearing racial slurs, such as degrading language, which can lead to hypervigilance (Woody et al., 2022). Depression is another common symptom of racial trauma, as a continuing feeling of sadness that can lead to depressive episodes (Woody et al., 2022). A study conducted by Henderson et al. (2019) with several young children who had been exposed to racial discrimination at school found that these experiences made the children feel less motivated and more alienated. Feelings of alienation are another symptom experienced after a traumatic event, especially one based on race. Exploring the impact of racial trauma on African American adults, Smith (2010) found that after such events, they perceived some aspects of their day as threatening and reflexively responded to them with social distancing. Further, subtle derogatory comments or behaviors are considered microaggressions, and peer interactions such as being socially isolated because of racial or ethnic differences are examples of the experiences students of color may encounter and that affect their mental and physical health (Alvarez et al., 2016).

### 3.3 From History to Awareness: Global Perspectives on Racism and Trauma

Racial trauma is historically rooted in the systemic and institutionalized racism experienced by marginalized communities. This trauma is not only a consequence of direct personal encounters with perceived racism but also involves vicarious experiences of racial violence, the

perpetuation of stereotypes, and the ongoing effects of historical oppression (Scott-Jones, 2020). Racial trauma can be understood through the lenses of general trauma and the history of trauma among African Americans. *Intergenerational trauma* is a component of racial trauma and is defined as “trauma that is transferred between generations as a result of exposure to adverse experiences affecting offspring through physiological and psychosocial transmission” (Rogers & Bryant-Davis, 2022, p. 171). An example of this is discussed in Dr. Joy DeGruy’s novel *Post Traumatic Slave Syndrome* within the African American culture (2005). According to DeGruy (2005), African American parents frequently refrain from acknowledging their children’s positive qualities due to coping mechanisms developed during times of slavery. For example, when White slave masters said something positive about an enslaved person’s child, the enslaved person only discussed the child’s negative characteristics to dissuade the slave master from selling them (DeGruy, 2005). DeGruy (2005) further explains that African American parents do not always acknowledge the legacy of intergenerational trauma because it has been passed down for years during and in the aftermath of slavery. Parents do not always acknowledge this trauma as not only historical in nature but also as reflected in the dehumanization, systemic racism, and oppression that are part of their and their children’s daily lives. Parents may have had to normalize experiences of racism and its effects on their everyday lives. As a result, some parents may not fully recognize racial trauma in the lives of their children, its implications, and associated challenges (Jernigan & Daniel, 2011). In most cases, these parents focus on teaching their children survival and resilience skills (Hughes et al., 2006). A study conducted by Eichstaedt et al. (2021) found that the week after George Floyd’s death, feelings of anger increased from 1.56% to 38.4% among African Americans, while depression rose from 1.32% to 38.1%. Other symptoms of racial trauma include behavioral responses to such trauma, including substance abuse, aggression, and social withdrawal. Coping mechanisms such as cultural resilience, cultural identity, and community support systems (strong kinship ties) were developed in response to racial trauma. However, they can sometimes be maladaptive, leading to further health complications. For instance, the use of substances as a means of dealing with the stress of racial discrimination can result in substance dependence and associated health risks (Hurd et al., 2014). Additionally, the emotional impact of racial trauma can lead to stress, which can induce distress, frustration, and anxiety (Williams, 2018) and mostly affects social relationships and, most likely, quality of life.

Importantly, the consequences of racial trauma extend beyond the individual, affecting subsequent generations. The intergenerational transmission of trauma occurs when the effects of trauma experienced by one generation influence the health and well-being of the next. This phenomenon is particularly evident in African American communities, where the historical context of slavery, segregation, and ongoing discrimination contributes to a persistent cycle of trauma. Yehuda et al. (2016) discussed how epigenetic changes (i.e., non-genetic influences on gene expression) triggered by trauma can be passed down, predisposing future generations to mental health disorders and other health issues.

Workplace discrimination remains a pervasive issue for African Americans. As revealed in a study by the Pew Research Center (Horowitz et al., 2019), 42% of African American adults reported experiencing racial discrimination at work. This discrimination often manifests as wage disparities, limited opportunities for advancement, and hostile work environments. The resulting stress and anxiety can affect mental health significantly, leading to issues such as depression and anxiety (Williams & Mohammed, 2009). Furthermore, economic disparities caused by workplace discrimination contribute to broader socioeconomic inequities, perpetuating cycles of poverty and limited access to resources.

Community violence—including gang violence, domestic violence, and police brutality—disproportionately affects African American communities. Recent statistics indicate that

African Americans are more likely to be victims of homicide than any other racial group in the US (National Center for Health Statistics, 2020). Exposure to such violence has profound implications for community health, leading to increased rates of post-traumatic stress disorder (PTSD), anxiety, and depression among community members (Alang et al., 2020). The pervasiveness of community violence also undermines social cohesion and trust, which are essential components of healthy and resilient communities.

Further, African American women face significant disparities in healthcare, particularly during childbirth. Research by the Centers for Disease Control and Prevention (2019) and the National Center for Health Statistics (2022) has shown that African American women are three to four times more likely to die from pregnancy-related complications than White women. Factors contributing to this disparity include systemic racism, implicit bias among healthcare providers, and limited access to quality prenatal care. Another study found that many African American women reported feeling unheard and disrespected by medical professionals during childbirth, contributing to heightened stress and adverse health outcomes (Howell et al., 2018). These experiences emphasize the urgent need for reforms in the healthcare system to address these imbalances and improve maternal health outcomes for African American women.

Further, generational trauma is exacerbated by the disproportionately higher incarceration rates for African Americans compared to other racial groups. According to the Bureau of Justice Statistics (2020), African Americans are incarcerated at more than five times the rate of White Americans. The impact of incarceration extends beyond the individuals imprisoned to affect families and communities through economic strain, disrupted family structures, and social stigma. For instance, children of incarcerated parents are more likely to experience behavioral problems, academic difficulties, and mental health issues (Turney & Goodsell, 2018). Recent policy changes, such as criminal justice reforms aimed at reducing mandatory minimum sentences, show some promise in addressing these disparities. However, much work remains to be done to create a more equitable justice system.

### **3.4 Post-Traumatic Stress Disorder and Racial Trauma**

According to the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition), (*DSM-5*; APA, 2013), a more nuanced PTSD diagnosis requires exposure to a traumatic event. The diagnostic criteria were revised, expanding from three symptoms to four major categories (intrusion, avoidance, negative alterations in mood and cognition, and alterations in arousal and reactivity) after at least one month. To qualify as PTSD, these symptoms must persist for more than one month and cause significant distress or impairment in social, occupational, or other important areas of functioning (Jellestad et al., 2021). Individuals with PTSD can develop mental health disorders (*DSM-5*; APA, 2013) and experience an increase in suicidal ideation and attempts (Kessler, 2000). PTSD is also associated with physical health issues such as metabolic disease, cardiovascular disease, and musculoskeletal disorders (Ryder et al., 2018).

PTSD and racial trauma have some similarities. However, racial trauma is not included in the *DSM-5*, even though their individual criteria are identical. For example, racial trauma can arise from a distressing medical experience, which would fall under Criterion A for a PTSD diagnosis: “a victim has persistent fear for the life of self/loved ones due to medical treatment” (Williams et al., 2022, p. 1). The difference between the two is that unlike PTSD, which is connected to a specific event, racial trauma is based on the accumulation of experiences of racial discrimination and oppression over time, such as microaggressions and social inequalities (Bryant-Davis & Ocampo, 2005). Microaggressions and macroaggressions are two points on the discrimination scale: microaggressions are subtle, everyday slights or offenses that accumulate to affect an individual’s mental health and social well-being, whereas

macroaggressions are overt and institutionalized forms of discrimination that affect broader societal structures.

Importantly, racial trauma stemming from direct and systemic racism has profound effects on children of color. These effects span their psychological, emotional, and physical health, significantly impacting their overall development and well-being (Anderson & Stevenson, 2019). Racial stressors have been known to increase physical and psychiatric issues, and children of color who have been personally affected by trauma benefit from their experiences being validated (Jernigan & Daniel, 2011). Two researchers, Cristol and Gimbert, examined studies on the development of racial attitudes in children in the 1940s; they concluded that social learning and cognitive development are crucial factors in children developing racial attitudes (Jernigan & Daniel, 2011).

The concept of adverse childhood experiences (ACEs) is helpful in understanding how racial trauma impacts children. According to Felitti et al. (1998), ACEs are potentially traumatic events that occur during childhood, such as abuse and household dysfunction (Felitti et al., 1998). These experiences can have long-lasting effects on a person's health and well-being, affecting their mental and physical health outcomes well into adulthood. The concept of ACEs was first introduced by a seminal study conducted by the CDC and Kaiser Permanente in the late 1990s. The study revealed a strong correlation between the number of ACEs a person experiences and the risk of health and social problems over their life course (Felitti et al., 1998). ACEs are an important aspect to understand when discussing children and racial trauma because children who are exposed to racism exhibit more mental health issues.

### **3.5 Impact in the Classroom**

Recent studies have explained the disproportionate burden of ACEs on children of color, who are more likely to experience both ACEs and racial trauma due to structural inequalities and systemic racism. For example, the research conducted by Finkelhor et al. (2015) showed that African American children are significantly more likely to report multiple ACEs than their White peers. This may be because these children often live in environments with higher levels of community violence, economic instability, and discrimination, which can exacerbate the effects of ACEs.

One of the most significant spaces where African American children face racism and racial trauma is at school. Anderson et al. (2023) conducted several studies on racial stress and how it affects African American children. Their results showed that children who experience racial discrimination often report higher levels of anxiety and depression, leading to difficulties with concentration, memory, and problem-solving skills (Anderson et al., 2023). The Adolescent Brain Cognitive Development (ABCD) Study (Nagata et al., 2021) indicates that 10% of African American students report experiencing racial discrimination in school settings, with 8.4% of adults, including teachers, contributing to these experiences. This is concerning because the school environment plays a significant role in the development of children, how they see themselves, and how they interact with their peers. The type of school environment children of color experience can quickly impact how they view themselves and school. This emotional impact can result in poorer academic achievement, increased absenteeism, and disengagement from school activities. A study by Saleem et al. (2020) found that many African American students reported experiencing racial trauma, with over 60% of high school students identifying racial discrimination as a significant stressor affecting their academic and emotional well-being.

### **3.6 Racial Trauma and the School System**

One of the main aspects of the school system contributing to children's racial trauma is teachers' perceptions of their students. Legette et al. (2021) found that how teachers perceive students of color and how these students view themselves at school can impact students' academic performance and well-being. When teachers hold beliefs about students of color—for instance, that they come from disadvantaged backgrounds or are more aggressive—they may discipline them more frequently or more harshly (Legette et al., 2021).

Jernigan and Daniel (2011) noted that when African American girls at school feel disrespected, they tend to do worse academically. This can also lead to students displaying more behavioral problems. Further, Jernigan and Daniel (2011) reported that students are less likely to participate at school when their academic performance has decreased. This can lead to decreased academic achievement as these students may have difficulties focusing, participating in class, or maintaining good grades due to the emotional toll of their experiences. This ongoing exposure to racial trauma not only affects their immediate academic outcomes but can also have long-term consequences for their educational and career prospects. Hence, African American students who have been exposed to racial trauma can struggle with both their academics and their mental health. The mental health issues affecting children who have experienced racial trauma impact their schooling by increasing absenteeism. For example, 23.4% of African American high school students missed at least 10% of the school days in the 2013–2014 academic year compared to 17.3% of their white counterparts (Trent et al., 2019). This plays a significant role in their later education because they are less likely to attend college or other educational institutions after high school and not realize the “full benefits of educational attainment” (Trent et al., 2019).

Microaggressions are another phenomenon that children of color experience at school and include mispronouncing names (Kohli & Solórzano, 2012). Teachers have even been known to complain that some African American or other ethnic names are too difficult to pronounce (Handford & Marrero, 2021). This can cause students to believe that their names' pronunciation does not matter or is inconvenient (Handford & Marrero, 2021). Kohli and Solórzano (2012, as cited in Handford & Marrero, 2021) discussed how the chronic misrepresentation of names of African American students leads to embarrassment and shame for the students, pushing some of them to discard their original names and use more mainstream American names (Handford & Marrero, 2021). Verbal and nonverbal stereotypes and insults perpetuate racial stereotypes (Steele & Aronson, 1995). Because such microaggressions undermine students of color, they help develop a hostile and alienating environment for these students. Notably, Jernigan and Daniel (2011) observed that African American boys who are discriminated against at school tend to report more feelings of hopelessness, a poorer self-concept, and withdrawal from the school environment.

Further, when African American students drop out of school or display “bad” behavior, they may experience alienation. Exploring the social context, Murdock (1999) pointed out two motivational predictors of alienation: race and social class. The majority of African American students are not from the middle or upper classes, adding another variable to racial trauma that is also linked to mental health and may lead to feelings of emotional and physical disconnectedness and relational issues (Henderson et al., 2019). African American young people may also exhibit more anger and violence due to feelings of alienation from their school and peers (Henderson et al., 2019). Substance abuse is another factor affecting students with racial trauma; Chasser (2016) examined the role of age, gender, and minority status among students at a youth treatment center for substance abuse and found that alcohol and drug abuse

was more prevalent among ethnic minority students, especially those who had been through traumatic experiences.

A review of empirical data revealed that a positive racial identity and neighborhood racial composition (predominantly Black and mixed) can mitigate some of the adverse mental health outcomes of racial trauma and depressive symptoms among African Americans (Hurd & Sellers, 2013). A study by Wong et al. (2004) found that experiences of racial and ethnic discrimination can affect academic performance and how children of color engage in the classroom.

The long-term effects of racial discrimination were also highlighted by Williams and Mohammed (2009, 2013), who showed that early exposure to racial discrimination profoundly affects the psychological well-being of children. Furthermore, in a study by Benner and Wang (2018), racial discrimination was found to cause behavioral adjustments in children of color, which points to how racial trauma can affect and manifest disruptive behaviors in academic settings. This may place children who experience such trauma in a cycle of disadvantages. To prevent this, culturally sensitive assessment tools must be made available in all school systems.

### **3.7 Best Practices for School Professionals**

It is important to use the correct instruments to assess racial trauma. The most appropriate assessment measures should provide accurate information about students. Assessments can begin after building rapport with students and obtaining their background information from their parents or guardians and teachers. Because these assessments may involve triggers, students should be debriefed afterward.

One tool for starting the assessment is the Race-Related Events Scale; this brief screening focuses on negative racial encounters that children may not realize they have had (Handford & Marrero, 2021). The questionnaire assesses standard traumatic events and can be employed with people from different minorities (Waelde et al., 2010). Waelde et al. (2010) conducted a study with undergraduate students of various backgrounds using the scale, which showed good validity and reliability, meaning that this assessment can be used to assess trauma in this population. In the study, the researchers found that White students reported lower stress following racial incidents than African American students, and African American students had higher scores for race-related issues on campus. These African American students also obtained higher scores for exposure to race-related issues off-campus, such as the death of a family member or injury (Waelde et al., 2010). The Perceptions of Racism in Children and Youth (PRaCY) instrument measures emotional responses to racial experiences perceived as unfavorable (Handford & Marrero, 2021). This tool is a self-report measure for people aged 8–18 years and assists administrators in discovering children’s perceptions of racial issues and how these affect them. Pachter (2010) noted that teachers often make assumptions about a student’s intelligence without much knowledge of the student.

The information gathered during this assessment can aid in better understanding the student’s life and school experiences with racism, and the assessment can also point to practical coping methods. The PRaCY has good reliability and validity for testing; it also has a clear structure, with questions grouped into dimensions of perceived racism (Pachter et al., 2009). According to Pachter et al. (2009), the PRaCY demonstrates good consistency (Cronbach’s alpha values > 0.70), which indicates that it provides a reliable measure of perceptions of racism across various groups of children and adolescents (Pachter et al., 2009). The assessment also shows good validity for anxiety, depression, self-esteem, and child development (Pachter et al., 2009).

Another comprehensive assessment tool, the Race-Based Traumatic Stress Symptoms Scale (RBTSSS), is recommended when trying to establish whether children of color have

experienced racial discrimination at school. The RBTSSS comprises 52 items that measure racial trauma and stress (Williams et al., 2018). It also contains open-ended questions that evaluate depression, anger, physical reactions, avoidance, intrusion, hypervigilance or arousal, and low self-esteem (Williams et al., 2018). These questions should be asked as soon as possible after an event. The RBTSSS has good reliability and validity; in particular, Carter et al. (2013) demonstrated its good construct validity when measuring the theoretical concept of race-based trauma. It was also shown to have excellent discriminant validity, which is important because symptoms can overlap with other mental health issues, and the RBTSSS can distinguish between race-based symptoms and unrelated symptoms, such as the daily stressors associated with being a child or adolescent (Carter et al., 2013).

Further, Williams and Zare (2022) designed a survey, the Unexplored Racial Experiences and Stress Symptoms Survey (UnRESTS), to assess “the cumulative impact of multiple remembered experiences of racism throughout one’s lifetime” (p. 3). These questions aim to help clinicians ask patients difficult questions about their experiences. Questions examine “the formation of ethnoracial identity,” and the survey includes “semi-structured interviews to probe for various race-related experiences” (Williams & Zare, 2022, p. 3). It also contains checklists for determining whether an individual’s racial trauma aligns with the *DSM-5* (APA, 2013) diagnostic criteria for PTSD. The sections include six racial and ethnic identity items rated on a scale of 0 to 12; scores of 0–3 are considered low, 4–8 are medium, and 9–12 is high. These categories specifically apply to People of Color (POC) in this survey. Cronbach’s alpha value was “ $\alpha=.66$ ” (Williams & Zare, 2022, p. 4). This indicates that the items in the scale measure aspects of social resistance behavior consistently (Factor et al., 2013). The UnRESTS also has good test-retest reliability, showing consistent stability with the same participants. In addition, its discriminant validity is good, suggesting that the scale does not correlate with dissatisfaction associated with other behavioral and personality traits.

Racial trauma is an important factor in the lives of students of color and must be addressed in and outside of school settings. It has a significant impact on their mental health, affecting them socially, emotionally, and academically (Jernigan & Daniel, 2011). Thus, professionals in the mental health field should consider racial trauma when assessing students and collaborate with them on treatment plans. Although racial trauma is not featured in the *DSM-5* (APA, 2013), it must be given more significant consideration in the future. Mental health providers should raise awareness of these types of assessments at schools and communities so that they can be added to the training of teachers, principals, and school staff. In addition, mental health practitioners and researchers must find the best and most culturally appropriate tools for helping children of color.

#### **4. Implications**

The findings from this research have significant implications for future mental health practice, education, and policy. First, we noted the urgent need for schools to adopt trauma-informed frameworks that specifically address racial trauma among children of color. Educators and school counselors must be trained to recognize the signs of racial trauma and implement interventions that foster emotional safety and resilience. Additionally, mental health clinicians are encouraged to integrate culturally responsive and evidence-based tools such as the PRaCY, UnRESTS, and RBTSSS into their assessments to ensure the accurate identification and treatment of racial trauma.

Longitudinal studies can be conducted to track the long-term effects of racial trauma on children’s mental health, academic performance, and overall well-being. Investigating the intersectionality of race, gender, socioeconomic status, and immigration experiences will also

improve our understanding of the impact of racial trauma on children. More broadly, policymakers should consider the systemic changes that are needed to combat institutionalized racism and its psychological effects on children of color, including reforming discriminatory practices in education and law enforcement. By addressing these areas, mental health professionals, educators, and policymakers can work together to create more equitable and supportive environments for children of color, promoting healing and fostering long-term positive outcomes.

## **5. Conclusion and Future Directions**

The findings of this study revealed a connection between racial trauma and adverse mental health and academic performance outcomes among children of color. Many children of color report symptoms consistent with anxiety and depression, which correlate with poorer academic achievement. Mental health clinicians are in a unique position to address the psychological impact of racial trauma on students. By conducting thorough racial trauma assessments, clinicians can better understand the specific stressors related to racial discrimination and its emotional impact on students. This is critical for providing culturally competent care, fostering resilience, and promoting healing in students affected by racism. To this end, clinicians must be equipped with the best tools and training to recognize, assess, and address racial trauma, ensuring that all students receive the support they deserve. In this context, it is important to advocate for students using evidence-based assessments such as PRaCY, UnRESTS, Race-Related Events Scale, and RBTSSS. These tools are essential in helping identify children who may be at risk of experiencing racial trauma.

Despite the insights gained from this research, several important questions remain unanswered: What specific assessment methods are most effective for identifying racial trauma in school children? How can educators and mental health professionals collaborate to create supportive environments for children experiencing racial trauma? What interventions or support strategies are most effective in mitigating the mental health impacts of racial trauma on students of color? Future research should attempt to answer these questions and either improve on the current tools or develop better, culturally sensitive tools to not only assess but also heal these students and free these educators of any racial bias. The objective is to enable these students of color to learn freely and not inherit and pass on race-related intergenerational traumas.

As mental health professionals and educators, we must continue this important dialogue and research on this critical issue in educational settings to ensure that children get the support they need and deserve (Spann, 2021). We must also develop strategies that can be implemented easily, such as:

1. Practical culturally competent workshops to train educators and clinicians in the importance of racial trauma assessments and their effective use. These workshops should emphasize the unique challenges students of color face and help identify unconscious behaviors and beliefs that must not be re-introduced to affected children. In addition, training modules can enhance teachers' and clinicians' ability to not only identify but also respond to the complexities of racial trauma in children of color.
2. Frameworks for collaboration between schools, mental health professionals, and parents within communities, as well as regular communication and meetings. Parents should be given opportunities to share their needs and experiences, and children should provide qualitative data about the assessment process that can be used to refine the assessment tools.

3. Safer school environments to facilitate open, age-appropriate classroom discussions about race and trauma. Schools should commit to promoting racial justice and providing community support for children from marginalized backgrounds.
4. Confidentially sharing assessment data (so as not to identify at-risk students) among schools in the community to guide school policies and practices that address systemic issues of racism and discrimination. The data will be most valuable if they capture the communities' challenges and strengths.

Assessments of available tools for relevance and effectiveness. Honest feedback would enable the development of intervention strategies that help affected students. These tools must adequately address the impact of racial trauma on school-aged children; to this end, it is imperative to refine assessment methodologies to prioritize cultural sensitivity, collaboration, and comprehensive evaluation. Implementing these strategies in assessment methodologies can significantly improve schoolchildren's understanding and management of racial trauma. This proactive approach emphasizes the importance of culturally sensitive practices and robust community collaboration, which ultimately foster a safer and more inclusive educational environment that supports all students' mental health and academic success.

As our understanding of racial trauma evolves, more collaborations are sought between mental health professionals and the educational system. With society recognizing the public health implications for these children and the need for unbiased research, some of these steps can be taken to ensure that children affected by racial trauma receive the comprehensive support they need to thrive and reach their full potential. A commitment to helping these children of color and addressing racial trauma is crucial for ensuring their long-term mental health and academic success. Furthermore, the strategies must involve regular feedback mechanisms and partnerships with schools, mental health professionals, parents, and students over time until all schools can provide mental health services to all school children in a safe and caring environment.

Additionally, future research should be unbiased and aim to examine the intersectionality of race and neurobiological and psychological factors during critical developmental periods and their long-term implications for children's academic achievement and emotional regulation. Recent educational initiatives have focused on implementing assessment tools to support these children. As noted above, culturally relevant interventions are needed to involve families and educators in the healing process of affected students. Longitudinal studies should thus be designed to examine the impact of trauma interventions. There is also a pressing need to identify and develop more culturally relevant assessment tools and interventions to support all children, regardless of their location or socioeconomic level.

This study highlighted the implications of racial trauma on the mental health and academic performance of children of color and suggested some proven assessment tools and ideas. However, partnerships between educators and mental health professionals are necessary to implement culturally sensitive assessment tools and strategies to create a more supportive educational environment for all children. Future research should, therefore, continue to explore the intersections of race and trauma as well as the effectiveness of interventions aimed at alleviating the impact of racial trauma. The objective is to help create a unified community and a commitment among professionals to understand and contribute to the healing of these children and empower them to reach their full potential. All children deserve the opportunity to succeed without being burdened by the effects of racial trauma.

## 6. References

- Alang, S., McAlpine, D. D., & Hardeman, R. (2020). Police brutality and mistrust in medical institutions. *Journal of Racial and Ethnic Health Disparities*, 7(4), 760–768. <https://doi.org/10.1007/s40615-020-00706-w>
- Alvarez, A. N., Liang, C. T., & Neville, H. A. (Eds.). (2016). *The cost of racism for people of color: Contextualizing experiences of discrimination*. American Psychological Association.
- American Psychological Association Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents (2008). *Children and trauma: Update for mental health professionals*. American Psychological Association. <http://www.apa.org/pi/families/resources/update.pdf>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Anderson, A. T., Doyle, D. M., Factor-Litvak, P., Cohn, B., & Link, B. G. (2023). Racial socialization and discrimination-related psychological distress in middle-aged Black men and women. *American Journal of Orthopsychiatry*, 93(5), 415–425. <https://doi.org/10.1037/ort0000687>
- Anderson, R. E., & Stevenson, H. C. (2019). RECASTing racial stress and trauma: Theorizing the healing potential of racial socialization in families. *American Psychologist*, 74(1), 63–75. <https://doi.org/10.1037/amp0000392>
- Benner, A. D., Wang, Y., Shen, Y., Boyle, A. E., Polk, R., & Cheng, Y.-P. (2018). Racial/ethnic discrimination and well-being during adolescence: A meta-analytic review. *American Psychologist*, 73(7), 855–883. <https://doi.org/10.1037/amp0000204>
- Bryant-Davis, T., & Ocampo, C. (2005). The trauma of racism: Implications for counseling, research, and education. *The Counseling Psychologist*, 33(4), 574–578. <https://doi.org/10.1177/0011000005276581>
- Bureau of Justice Statistics. (2020). *Prisoners in 2019*. U.S. Department of Justice. <https://bjs.ojp.gov/content/pub/pdf/p19.pdf>
- Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist*, 35(1), 13–105. <https://doi.org/10.1177/0011000006292033>
- Carter, R. T., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S., Sant-Barket, S., Forsyth, J., Bazelaïs, K., & Williams, B. (2013). Initial development of the Race-Based Traumatic Stress Symptom Scale: Assessing the emotional impact of racism. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(1), 1–9. <https://doi.org/10.1037/a0025911>
- Centers for Disease Control and Prevention. (2019). *Racial and ethnic disparities continue in pregnancy-related deaths*. Morbidity and Mortality Weekly Report. <https://archive.cdc.gov/#/details?url=https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>
- Chasser, Y. M. (2016). Profiles of youth with PTSD and addiction. *Journal of Child & Adolescent Substance Abuse*, 25(5), 448–454. <https://doi.org/10.1080/1067828X.2015.1081115>

- Comas-Díaz, L., Hall, G. N., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the Special Issue. *American Psychologist*, *74*(1), 1–5. <https://doi.org/10.1037/amp0000442>
- DeGruy, J. (2005). *Post traumatic slave syndrome: America's legacy of enduring injury and healing*. Joy DeGruy Publications.
- Eichstaedt, J. C., Sherman, G. T., Giorgi, S., Roberts, S. O., Reynolds, M. E., Ungar, L. H., & Guntuku, S. C. (2021). The emotional and mental health impact of the murder of George Floyd on the US population. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(39), Article e2109139118. <https://doi.org/10.1073/pnas.2109139118>
- Factor, R., Kawachi, I., & Williams, D. R. (2013). Evaluation of the UNREST questionnaire for testing the social resistance framework. *Journal of Epidemiology and Community Health*, *67*(7), 618–620. <https://doi.org/10.1136/jech-2012-201465>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14*(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
- Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2015). A revised inventory of Adverse Childhood Experiences. *Child Abuse & Neglect*, *48*, 13–21. <https://doi.org/10.1016/j.chiabu.2015.07.011>
- Handford, C., & Marrero, A. D. (2021). *Racial trauma in the school system: Naming the pain*. Routledge. <https://doi.org/10.4324/9780429029615>
- Henderson, D. X., Walker, L., Barnes, R. R., Lunsford, A., Edwards, C., & Clark, C. (2019). A framework for race-related trauma in the public education system and implications on health for Black youth. *Journal of School Health*, *89*(11), 926–933. <https://doi.org/10.1111/josh.12832>
- Horowitz, J. M., Brown, A., & Cox, K. (2019, April 9). *Race in America 2019*. Pew Research Center. [https://www.pewresearch.org/wp-content/uploads/sites/20/2019/04/Race-report\\_updated-4.29.19.pdf](https://www.pewresearch.org/wp-content/uploads/sites/20/2019/04/Race-report_updated-4.29.19.pdf)
- Howell, E. A., Brown, H., Brumley, J., Bryant, A. S., Caughey, A. B., Cornell, A. M., Grant, J. H., Gregory, K. D., Gullo, S. M., Kozhimannil, K. B., Mhyre, J. M., Toledo, P., D’Oria, R., Ngoh, M., & Grobman, W. A. (2018). Reduction of peripartum racial and ethnic disparities: A conceptual framework and maternal safety consensus bundle. *Obstetrics and Gynecology*, *131*(5), 770–782. <https://doi.org/10.1097/AOG.0000000000002475>
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents’ ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, *42*(5), 747–770. <https://doi.org/10.1037/0012-1649.42.5.747>
- Hurd, N. M., Varner, F. A., Caldwell, C. H., & Zimmerman, M. A. (2014). Does perceived racial discrimination predict changes in psychological distress and substance use over time? An examination among Black emerging adults. *Developmental Psychology*, *50*(7), 1910–1918. <https://doi.org/10.1037/a0036438>
- Hurd, N. M., Sellers, R. M., Cogburn, C. D., Butler-Barnes, S. T., & Zimmerman, M. A. (2013). Racial identity and depressive symptoms among Black emerging adults: The moderating

- effects of neighborhood racial composition. *Developmental Psychology*, 49(5), 938–950. <https://doi.org/10.1037/a0028826>
- Jellestad, L., Vital, N.A., Malamud, J., Taeymans, J., & Mueller-Pfeiffer, C. (2021). Functional impairment in posttraumatic stress disorder: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 136, 14–22. <https://doi.org/10.1016/j.jpsychires.2021.01.039>
- Jernigan, M. M., & Daniel, J. H. (2011). Racial trauma in the lives of Black children and adolescents: Challenges and clinical implications. *Journal of Child & Adolescent Trauma*, 4, 123–141. <https://doi.org/10.1080/19361521.2011.574678>
- Jones, B. L. (2020). *Reducing racism in schools: The promise of anti-racist policies*. UCONN, NEAG School of Education. <https://education.uconn.edu/2020/09/22/reducing-racism-in-schools-the-promise-of-anti-racist-policies/>
- Kessler, R. C. (2000). Posttraumatic stress disorder: the burden to the individual and to society [Supplemental material]. *Journal of Clinical Psychiatry*, 61, 4–14.
- Kohli, R., & Solórzano, D. G. (2012). Teachers, please learn our names!: Racial microaggressions and the K-12 classroom. *Race Ethnicity and Education*, 15(4), 441–462. <https://doi.org/10.1080/13613324.2012.674026>
- Legette, K. B., Halberstadt, A. G., & Majors, A. T. (2021). Teachers' understanding of racial inequity predicts their perceptions of students' behaviors. *Contemporary Educational Psychology*, 67, Article 102014. <https://doi.org/10.1016/j.cedpsych.2021.102014>
- Murdock, T. B. (1999). The social context of risk: Status and motivational predictors of alienation in middle school. *Journal of Educational Psychology*, 91(1), 62–75. <https://doi.org/10.1037/0022-0663.91.1.62>
- Nagata, J. M., Ganson, K. T., Sajjad, O. M., Benabou, S. E., & Bibbins-Domingo, K. (2021). Prevalence of perceived racism and discrimination among US children aged 10 and 11 years: The Adolescent Brain Cognitive Development (ABCD) Study. *JAMA Pediatrics*, 175(8), 861–863. <https://doi.org/10.1001/jamapediatrics.2021.1022>
- National Center for Health Statistics. (2020). *Homicide mortality by state*. [https://www.cdc.gov/nchs/pressroom/sosmap/homicide\\_mortality/homicide.htm](https://www.cdc.gov/nchs/pressroom/sosmap/homicide_mortality/homicide.htm)
- National Center for Health Statistics. (2022). *Maternal Mortality Rates in the United States, 2022*. <https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2022/maternal-mortality-rates-2022.pdf>
- Neblett, E. W., Jr., Rivas-Drake, D., & Umaña-Taylor, A. J. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives*, 6(3), 295–303. <https://doi.org/10.1111/j.1750-8606.2012.00239.x>
- Pachter, L. M. (2010). Child healthcare disparities: Findings from the annual report and future directions. *Academic Pediatrics*, 10(2), 87–88. <https://doi.org/10.1016/j.acap.2010.01.009>
- Pachter, L. M., Szalacha, L. A., Bernstein, B. A., & García Coll, C. (2009). Perceptions of racism in children and youth (PRaCY): Properties of a self-report instrument for research on children's health and development. *Ethnicity & Health*, 15(1), 33–46. <https://doi.org/10.1080/13557850903383196>
- Rogers, G., & Bryant-Davis, T. (2022). Historical and contemporary racial trauma among Black Americans: Black wellness matters. In R. Geffner, J. W. White, L. K. Hamberger, A.

- Rosenbaum, V. Vaughan-Eden, & V. I. Vieth (Eds.), *Handbook of interpersonal violence and abuse across the lifespan: A project of the National Partnership to End Interpersonal Violence Across the Lifespan (NPEIV)* (pp. 165–199). Springer Nature Switzerland AG. [https://doi.org/10.1007/978-3-319-89999-2\\_338](https://doi.org/10.1007/978-3-319-89999-2_338)
- Ryder, A. L., Azcarate, P. M. & Cohen, B. E. (2018). PTSD and physical health. *Current Psychiatry Reports*, 20, 116. <https://doi.org/10.1007/s11920-018-0977-9>
- Saleem, F. T., Anderson, R. E., & Williams, M. (2020). Addressing the “myth” of racial trauma: Developmental and ecological considerations for youth of color. *Clinical Child and Family Psychology Review*, 23(1), 1–14. <https://doi.org/10.1007/s10567-019-00304-1>
- Scott-Jones, G. (2020). The traumatic impact of structural racism on African Americans. *Delaware Journal of Public Health*, 6(5), 80–82. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8352535/>
- Smith, W. H. (2010). The impact of racial trauma on African Americans. *The Heinz Endowments*, 1–7. <https://www.heinz.org/userfiles/impactofracialtraumaonafricanamericans.pdf>
- Spann, D. (2021). Ethical considerations for psychologists addressing racial trauma experienced by Black Americans. *Ethics & Behavior*, 32(2), 99–109. <https://doi.org/10.1080/10508422.2021.1964080>
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811. <https://doi.org/10.1037/0022-3514.69.5.797>
- Sullivan, J. N., Eberhardt, J. L., & Roberts, S. O. (2021). Conversations about race in Black and White US families: Before and after George Floyd’s death. *Proceedings of the National Academy of Sciences of the United States of America*, 118(38), <https://doi.org/10.1073/pnas.2106366118>
- Trent, M., Dooley, D. G., Dougé, J., Section on Adolescent Health, Council on Community Pediatrics, Committee on Adolescence, Cavanaugh, R. M., Lacroix, A. E., Fanburg, J., Rahmandar, M. H., Hornberger, L. L., Schneider, M. B., Yen, S., Chilton, L. A., Green, A. E., Dilley, K. J., Gutierrez, J. R., Duffee, J. H., Keane, V. A., ... Wallace, S. B. (2019). The impact of racism on child and adolescent health. *Pediatrics*, 144(2), e20191765. <https://doi.org/10.1542/peds.2019-1765>
- Turney, K., & Goodsell, R. (2018). Parental incarceration and children’s wellbeing. *The Future of Children*, 28, 147–164. <https://files.eric.ed.gov/fulltext/EJ1179185.pdf>
- Waelde, L. C., Pennington, D., Mahan, C., Mahan, R., Kabour, M., & Marquette, R. (2010). Psychometric properties of the Race-Related Events Scale. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2(1), 4–11. <https://doi.org/10.1037/a0019018>
- Weine, S., Kohrt, B. A., Collins, P. Y., Cooper, J., Lewis-Fernandez, R., Okpaku, S., & Wainberg, M. L. (2020). Justice for George Floyd and a reckoning for global mental health. *Global Mental Health*, 7, e22. <https://doi.org/10.1017/gmh.2020.17>
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, 32(1), 20–47. <https://doi.org/10.1007/s10865-008-9185-0>
- Williams, D. R., & Mohammed, S. A. (2013). Racism and health I: Pathways and scientific evidence. *American Behavioral Scientist*, 57(8), 1152–1173. <https://doi.org/10.1177/0002764213487340>

- Williams, D. R. (2018). Stress and the mental health of populations of color: Advancing our understanding of race-related stressors. *Journal of Health and Social Behavior*, 59(4), 466–485. <https://doi.org/10.1177/0022146518814251>
- Williams, M., & Zare, M. (2022). A psychometric investigation of racial trauma symptoms using a semi-structured clinical interview with a trauma checklist (UnRESTS). *Chronic Stress*, 6, 1–11. <https://doi.org/10.1177/24705470221145126>
- Williams, M. T., Metzger, I. W., Leins, C., & DeLapp, C. (2018). Assessing racial trauma within a *DSM-5* framework: The UConn Racial/Ethnic Stress & Trauma Survey. *Practice Innovations*, 3(4), 242–260. <https://doi.org/10.1037/pri0000076>
- Woody, M. L., Bell, E. C., Cruz, N. A., Wears, A., Anderson, R. E., & Price, R. B. (2022). Racial stress and trauma and the development of adolescent depression: A review of the role of vigilance evoked by racism-related threat. *Chronic Stress*, 6, 24705470221118574. <https://doi.org/10.1177/24705470221118574>
- Wong, C. A., Eccles, J. S., & Sameroff, A. J. (2004). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioeconomic adjustment. *Journal of Personality*, 71(6), 1197–1232. <https://doi.org/10.1111/1467-6494.7106012>
- Yehuda, R., Daskalakis, N. P., Bierer, L. M., Bader, H. N., Klengel, T., Holsboer, F., & Binder, E. B. (2016). Holocaust exposure induced intergenerational effects on FKBP5 methylation. *Biological Psychiatry*, 80(5), 372–380. <https://doi.org/10.1016/j.biopsych.2015.08.005>