

The Role of Indirect Exposure to Police Violence in Black Adolescent Suicidality

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Abstract Exposure to racism may negatively impact psychological well-being among Black adolescents, for whom suicide rates have risen within the past decade. Using publicly available data from the Youth Risk Behavior Survey and the Mapping Police Violence Database, the association between indirect exposure to racism due to living in a state with higher police killings of Black Americans and youth self-reported suicide risk and behavior was tested. The analysis sample included 6201 Black and White high school students (22.4 % Black; 48.4% Male). Results of six multilevel models showed that indirect exposure to police killings was not significantly predictive of suicide risk and behavior, but when indirect exposure was defined as the rate of Black people killed, a significant interaction was found, $\beta = -0.03$, $t(6173) = -2.47$, $p = .013$. Black participants who lived in states with higher rates were more likely to report suicidality in comparison to White participants residing in those states. Findings indicate that police violence against Black Americans may negatively affect Black adolescents' mental health.

Index Terms— *Racism-related stress, Black adolescents, police violence, police brutality, suicide*

INTRODUCTION

Between January 1, 2013, and December 31, 2020, police killed 2198 Black civilians, which is approximately 25% of the total police killings during this time frame (Sinyangwe et al., 2021). In the United States, Black people are disproportionately killed by police although they are less likely to pose an active threat at the time of their death. Specifically, they are three times more likely to be killed than White people despite the fact that they are 1.3 times less likely to be armed (Sinyangwe et al., 2021). Since the establishment of the Black Lives Matter Movement in 2013, news coverage of and political attention regarding the unjust killings of Black Americans increased. As a result of increased awareness of police brutality, there have been a variety of protests against police violence which have resulted in legislative changes such as the George Floyd Act. However, these changes have not addressed the psychological impact of police violence on Black Americans, and, more specifically, Black adolescents, for whom suicide rates have risen within the past decade (Opara et al., 2020).

These increasing suicide rates may be the effect of racism-related stress (Harrell, 2000), which may be exacerbated by increased indirect exposure to police violence through the spread of videos of police killings, social media hashtags of victims' names, attendance at protests, and heightened political conversations surrounding

the topic. Though there have been some strides in research to better understand the effect of police violence on minority psychological well-being, few focus on the well-being of adolescents and even fewer have centered their arguments on Black adolescents specifically (Bor et al., 2018; Jackson et al., 2017; Tynes et al., 2019). Addressing this gap and the recent increase in Black adolescent suicide, the current study seeks to illuminate whether being a Black adolescent who resides in a state with a higher incidence of police killings of Black victims, a proxy for indirect exposure to police violence, is associated with greater suicide risk and behavior.

Racism-related Stress

The disparity between the amount of Black victims of police violence and victims of other racial groups suggests that high rates of police killings of Black individuals are not coincidental, but rather motivated by racism (Pleskac et al., 2018; Ross, 2015). Accordingly, indirect exposure to these killings, can be categorized as a race-related stressor for Black adolescents. First defined by Shelly Harrell (2000), racism-related stress refers to "race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being" (p. 44). Following this definition, increased awareness of police brutality against Black civilians may present a threat to Black adolescents, thus

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negatively impacting their mental health.

Several studies have already identified discrimination, perceptions of racism, racial socialization, and other race-related stressors as predictors of symptoms of depression (Brody et al., 2006; Davis & Stevenson, 2006; Lambert et al., 2009; Simons et al., 2002). For example, a study of Black adolescent girls by Lambert et al. (2009) found that perceived racism was negatively associated with feelings of academic control that, in turn, were positively associated with depressive symptoms. Additionally, Davis and Stevenson (2006) reported that increased salience of racial socialization, defined as the act of communicating information about the meaning of one's race in the context of society (Coard & Sellers, 2005), was associated with the depressive symptom of instrumental helplessness in Black adolescents. Furthermore, positive correlations between depressive symptoms in African American adolescents and experiences with discrimination were found in both survey and longitudinal designs (Brody et al., 2006; Simons et al., 2002). These findings suggest that racism-related stress, which includes discrimination, and perceptions of racism, is associated with depression in Black adolescents. This association indicates that indirect exposure to police violence, which may increase salience of discrimination and racism, may also be associated with depression in Black adolescents.

Police Violence Research

Although research demonstrates an association between racism-related stress and depressive symptoms in Black individuals, few studies have examined the association between indirect exposure to police killings and suicidality in Black adolescents. However, several qualitative studies explore the relationship between direct exposure to police violence and trauma in Black boys and men. A case study (Aymer, 2016) of a 16-year-old Black male showed that he experienced a range of traumatic symptoms including nightmares, irritability, flashbacks and intrusive thoughts surrounding his experience of being chased and frisked by police. In the same vein, through interviews with 40 Black men, Smith Lee and Robinson (2019) found that participant's lifelong experiences with police violence met the criteria for trauma listed in the DSM-5, providing additional evidence that exposure to police violence is associated with negative mental health outcomes in Black individuals.

Conversely, quantitative studies have reported associations between indirect exposure to police violence and symptoms of depression in both Black adults and adolescents. For example, a study by Jackson et al. (2017) sampled a group of pregnant Black women and found a positive association between stress surrounding the

anticipation of police violence towards African American youth and symptoms of prenatal depression. Using a more sociological approach, Bor et al. (2018) compared the number of police killings of unarmed Black Americans in a particular state to the number of "bad mental health days" that Black adult participants reported experiencing and found that each police killing to which participants were indirectly exposed (assessed as a killing occurring in the state where the participants resided) was correlated with an increase in poor mental health days. More importantly, they found that these results were not seen in White participants. In comparison, Tynes et al. (2019) conducted a study of Black and Latinx adolescents regarding their direct exposure to traumatic events online such as videos of individuals from their racial background being beaten or shot by police, and self-reported symptoms of depression and post-traumatic stress disorder. The researchers found that there was a positive correlation between exposure to traumatic events online and symptoms of depression and PTSD.

Thus, current literature exemplifies the association between race-related stressors, and depressive symptoms in Black individuals. Such stressors include police killings of Black individuals, exposure to traumatic content through traditional and social media, and anticipation of violent police interactions with Black youth. Although only Tynes et al. (2019) and Aymer (2016) focus on Black adolescents, overall, both qualitative and quantitative research suggests that across age groups, genders, and types of contact with police (direct versus indirect) exposure to police violence is related to negative psychological outcomes, such as symptoms of depression in Black individuals.

In sum, research on the association between exposure to police violence and psychological well-being in Black Adolescents remains novel and minimal, but current literature suggests that direct and indirect exposure is positively correlated with an increase in psychological distress (Aymer 2016; Tynes et al., 2019). However, only one study has focused on the unique association between indirect exposure to police violence and adolescents of color, and this study analyzed adolescents of color as a monolith, with their research emphasizing increased depressive symptoms in Latinx individuals only (Tynes et al., 2019). Hence, a pressing need exists for research that focuses on the possible mental health effects of indirect exposure to police violence on Black adolescents due to the rise of Black adolescent suicide rates in the past decade, and increasing media and political attention given towards police killings of Black civilians.

Building on the theory of racism-related stress (Harrell, 2000) and partially replicating the work of Bor et al. (2018), the present study aims to understand whether indirect

exposure to police violence is associated with increased suicide risk and behavior, particularly in Black adolescents. To answer this question, I examine whether state-wide rates of police killings of Black individuals are associated with suicide risk and behavior in high school students by combining data from the Mapping Police Violence (MPV) database and self-reported youth surveys in the 2019 Youth Risk Behavior Surveillance System (Centers for Disease Control, 2019; Sinyangwe et al., 2021). I hypothesize that there will be a positive association between indirect exposure to police killings and suicide risk and behavior in Black adolescents. I also hypothesize that this association will be stronger in Black adolescents than White adolescents.

METHODOLOGY

Participants

Participant data were obtained from the Centers for Disease Control 2019 National Youth Risk Behavior Survey (YRBS), a questionnaire distributed to American students between grades 9 and 12, for youth reported measures and from MPV for state-wide rates of police committed killings. These data were merged for participant level analyses. To be included in the analysis, participants first had to identify as Black (either as their sole or one of multiple racial/ethnic identifiers) or White (with no other racial or ethnic identities). In addition, participants had to have complete data included in analyses (i.e., gender, sexual minority status, suicide risk and behavior, and alcohol use). The resulting analysis sample consisted of 6201 youth and was mostly female (51.6%) and between the ages of 13 to 18 (13 or younger = .1%, 14 = 11.2%, 15 = 26.1%, 16 = 26.5%, 17 = 23.1%, 18 or older = 13%), White (77.6%, N=4810), heterosexual (84.2%), and represented 23 U.S. states.

Table 1. Descriptive statistics for study variables

Variable	N=6201	Percentage	Mean	SD
Gender	--	--	--	--
Female	3198	51.6	--	--
Male	3003	48.4	--	--
Sexual identity	--	--	--	--
Not straight	981	15.8	--	--
Straight	5220	84.2	--	--
Alcohol use	--	--	--	--
Drinkers	1869	30.1	--	--
Non-drinkers	4332	69.9	--	--
Race				
Black	1391	22.4	--	--
White	4810	77.6	--	--
Suicide risk and behavior	--	--	.81	1.20

Procedures

The YRBS includes school-based representative samples from the nation's public and private high schools, including

schools in the District of Columbia, but not including U.S. territories, such as Puerto Rico. The probability that a school would be selected for the YRBS was proportional to the number of students enrolled in grades 9 through 12. The same system was used to select classes to participate in the survey with the sample frame including only required classes or classes that met during a specific period. Out of the 181 schools sampled, 136 participated in the survey.

Police violence data were collected from the Mapping Police Violence (MPV) online database (Sinyangwe et al., 2021). MPV defines police killings as "a case where a person dies as a result of being shot, beaten, restrained, intentionally hit by a police vehicle, pepper sprayed, tasered, or otherwise harmed by police officers, whether on-duty or off-duty" (Sinyangwe et al., 2021). MPV lists police killings by state and police department since 2013. The data were compiled from official police use of force data collection programs in particular states and nationwide data from the national Fatal Encounters database, a database on police killings. Additionally, MPV references social media posts, obituaries, criminal records databases, and police reports to identify the race of victims in the database (Sinyangwe et al., 2021). Although the MPV database includes police killings from 2013 to the present, I included only killings between 2013 and 2019 to align the police killings data with the dissemination of the 2019 YRBS. Furthermore, while MPV utilized 2018 census state population estimates, I used 2019 estimates to align with the YRBS data.

Measures

Covariates included race, sexual minority status, gender, and current alcohol use. Whiteness (coded 0) was limited to only those who identified as both racially and ethnically White such that Latino/Hispanic individuals who were White were excluded from the sample. Blackness was defined as anyone who identified as Black (coded 1) and had three or less racial identifiers, without regard for Latino/Hispanic ethnicity. For example, participants who identified as racially Black, Asian, and White and ethnically Hispanic were counted as Black, but not participants that identified as Black, Asian, White, American Indian, and ethnically Hispanic. This distinction was made to limit the amount of racially ambiguous participants categorized as Black, since I hypothesized that identification as Black was a major factor in whether one might be affected by indirect exposure to police violence. Sexual minority status was defined as whether participants identified as straight/heterosexual (coded 1) or not straight (lesbian, gay, bisexual, not sure) (coded 0). Gender was defined as identification as male (coded 0) or female (coded 1). Current drinking status was defined as whether participants had consumed at least one alcoholic beverage in the 30 days



prior to taking the YRBS (currently drink [coded 1] = 30.1%, do not currently drink (coded 0) = 69.9%.

Suicide Risk and Behavior. The dependent variable, suicide risk and behavior, was compiled from four items drawn from the YRBS: “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?” (yes = 36.4%, no = 63.6%), “During the past 12 months, did you ever seriously consider attempting suicide?” (yes = 19.5%, no = 80.5%), “During the past 12 months, did you make a plan about how you would attempt suicide?” (yes = 15.6%, no = 84.4%), “During the past 12 months, how many times did you actually attempt suicide?” (yes = 8.9%, no = 91.1%). The question of how many times a participant attempted suicide was dichotomized to reflect whether a participant had attempted suicide at least once (coded 1) or not (coded 0). The four dichotomous questions were then summed to create the suicide risk and behavior variable for analyses, $\alpha = .77$, $M = .8$, $SD = 1.2$.

Indirect Exposure to Police Violence. The independent variable, or indirect exposure to police violence against Black individuals, was coded based on a participant’s residency in a state based on their YRBS state identifier. Consequently, anyone residing in a state would be defined as indirectly exposed to police violence. The state-level of analysis was chosen for two reasons: (1) to align MVP with YRBS data, since participant geographic identifiers were only available at the state level, in the YRBS and (2) to replicate the definition of police violence exposure used by Bor et al. (2018). Furthermore, police killings of Black individuals at the state level were limited to those that occurred between January 1, 2013 and December 31, 2019. These dates were chosen to represent the building effect of exposure to police violence for six years prior to align with the 2019 YRBS.

Indirect exposure was derived from six values taken from the MPV database: prevalence of Black people killed by police (i.e., Black people killed in MPV called Black killings [BK] here), percent of state-wide Black population killed by police (i.e., victims Black [VB]), the prevalence of Black people killed in proportion to the Black population of a state (i.e., rate [Black people] in MPV called rate of Black killings [RBK] here), the difference between the percent of Black people killed in a state and the percentage of a state’s residents that are Black (i.e., Disparity in MPV called population disparity [PD] here), the rate of Black people killed over the rate of White people killed (i.e., Black-White disparity [BWD]), and the rate of Black people killed by police in a state over the rate of all people killed by police in a state (i.e., disparity in rate for Black in MPV called Black versus others disparity [BVOD] here).

The variable Black killings was chosen to replicate Bor

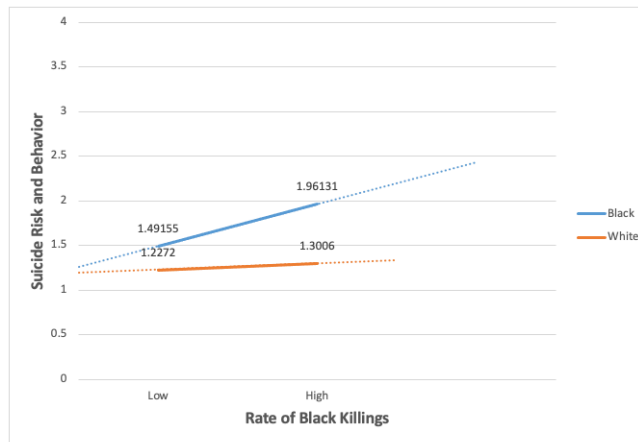
et al.’s (2018) methodology in which they identified the amount of police killings of Black individuals that occurred in a participant’s state in the time frame of their selected survey as a predictor of the number of bad mental health days that participants experienced. Rate of Black killings and victims Black were chosen for this reason as well, but were also utilized to better represent the amount of police killings of Black individuals occurring in comparison to a state’s population. Similarly, population disparity, Black White disparity, and Black versus others disparity were chosen to capture the discrepancy between the low percentage of Black people in the United States compared to the high number of police victims who are Black. In this way, rate of Black killings, victims Black, population disparity, Black White disparity, and Black versus others disparity build on Bor et al.’s work by emphasizing disparities in police killings rather than solely focusing on overall prevalence.

RESULTS

Preliminary analyses included a review of variable distributions to make sure assumptions of normality were met for regression models. Table 1 reports descriptive statistics. The results of the t-test showed that there were differences between rates of suicide risk and behavior between groups based on gender, sexual orientation, current drinking status, and race. Females reported higher rates of mental health problems than did males, $t(6199) = -14.05$, $p < .001$. LGBTQ+ youth reported higher rates of mental health problems than did heterosexual youth, $t(6199) = 24.83$, $p < .001$. Current drinkers reported higher rates of mental health problems than those who do not currently drink, $t(6199) = -13.15$, $p < .001$. Black students reported higher mental health problems than did White students, $t(6199) = -2.65$, $p = .05$. Additionally, chi-square tests showed that females were more likely to be current drinkers than males, Chi-square (1) = 9.66, $p < .01$, and White youth were more likely to be current drinkers than Black youth, Chi-Square (1) = 91.59, $p < .001$.

To test whether indirect exposure to police violence uniquely predicted suicide risk and behavior among Black adolescents, six multilevel model analyses were conducted, each controlling for race, gender, sexual minority status, and current alcohol use. These analyses tested the two hypotheses for this study: (Hypothesis 1) Indirect exposure to police violence is associated with an increase in suicide risk and behavior among adolescents and (Hypothesis 2) the association between indirect exposure to police violence and suicide risk and behavior is stronger in Black adolescents than White. It is the case that none of the following were predictive of suicide risk and behavior:

Figure 1. Interaction of race and rate of Black killings



Note. The differences in the association between rates of police killings of Black individuals in a particular state and suicide risk and behavior for adolescents living in states with either high or low rates of police killings of Black individuals.

Black killings, $\beta = -0.00020$, $t(20) = -0.33$, $p > .05$; population disparity, $\beta = -0.00378$, $t(21) = -1.56$, $p > .05$; Black-White disparity ($\beta = -0.01563$, $t(21) = -1.08$, $p > .05$; victims Black, $\beta = -0.00205$, $t(21) = -1.11$, $p > .05$; or Black versus others disparity, $\beta = -0.00503$, $t(21) = -0.20$, $p > .05$. Rate of Black killings also was not found to be predictive of suicide risk and behavior, $\beta = -0.009224$, $t(21) = 1.39$, $p > .05$; but a significant interaction effect between race and rate of Black killings was found, $\beta = -0.03$, $t(6173) = -2.47$, $p = .013$; see Figure 1. Probing of this interaction showed that Black adolescents living in states with higher rates of police killings of Black individuals experienced greater suicide risk and behavior than Black adolescents living in states with lower rates of police killings, a difference that was much less evident in White adolescents.

DISCUSSION

The current study tested whether indirect exposure to police violence against Black individuals is associated with increased suicide risk and behavior, particularly for Black adolescents. Results showed that indirect exposure to police violence was not significantly predictive of suicide risk and behavior, and for most definitions of indirect exposure, no interaction with race was found. However, when indirect exposure to police violence was defined as the rate of Black people killed by police in a state, Black participants living in states with higher rates of police killings of Black individuals reported higher suicide risk and behavior than Black participants living in states with lower rates and this difference was less evident for White participants.

The results of my study are consistent with previous research. My study suggests that Black adolescents in states with higher rates of police killings of Black people report higher suicidality which coincides with Bor et al.'s (2018) finding that exposure to police killings of unarmed Black

Americans was associated with negative mental health changes in Black adult Americans, and not White Americans. This similarity suggests that police killings of Black Americans negatively impact Black individuals very differently than White individuals. The congruence of these findings is even more striking considering the differing methodologies. While Bor et al. (2018) limited police killings to unarmed victims, the current study included all police killings of Black individuals regardless of the supposed threat that they posed. This decision was made based on reports of police planting evidence to frame victims of police shootings as armed in order to justify these killings (Associated Press, 2017; Fenton, 2020; Heffernan, 2019). Because it is difficult to discern the accuracy of police reports, I chose to include all police killings in my analyses, regardless of whether a victim was allegedly armed. The fact that significant results were still found even when the sample of police killings included armed suspects suggest that Black adolescents may be affected overall by exposure to police killings of Black individuals regardless of whether killings are considered unjust or victims are considered innocent. Importantly, the distinction between armed and unarmed victims may be more salient to non-Black youth who may see armed victims as less innocent whereas Black youth may hold greater suspicion regarding whether a victim was actually armed or not and the extent to which being armed is a sign of innocence. Therefore, it is possible that the association would be even stronger if only unarmed killings were included in the analyses since Black adolescents, who may be more likely to identify with innocent victims, may feel more threatened by these killings.

In addition to echoing Bor et al.'s findings, my study can also be interpreted in terms of race-related stressors, such as discrimination and perceptions of racism, which have been previously shown to significantly predict depressive symptoms (Brody et al., 2006; Lambert et al., 2009; Simons et al., 2002). Building on Harrell's (2000) theory of racism-related stress, police killings of Black Americans may serve as a race-related stressor for Black adolescents. The fact that White adolescents living in states with higher rates of police killings of Black individuals did not report higher suicidality suggests that indirect exposure to police violence against Black people may be an index of race-related stress rather than an indicator of living in a state with more violent crimes or more aggressive policing, which could have been proposed as explanations for the association if White adolescents had been found to be affected as well.

Indirect exposure may have an impact on Black adolescents by increasing their levels of perceived discrimination. If Black adolescents see that they are at increased risk of being killed by police, then they may associate that risk with increased institutional racism which may in turn decrease their feelings of self-empowerment,



control over their lives, and hope for the future, all of which could then increase their risk for depression, and thus put them at increased risk for suicide. Thus, the findings of my study highlight a clear need for policy aimed at reducing the incidence of police killings of Black individuals, which can act as a race-related stressor. Nationwide policy aimed at decreasing police killings of Black Americans could minimize race-related stress connected to Black adolescent's exposure to police violence in their proximity, as well as stress related to police killings that happen outside of their state that may increase perceptions of racial injustice, which may in turn increase negative psychological outcomes. Additionally, protective factors should be identified to moderate the relationship between exposure to police killings of Black individuals, as a race-related stressor, and suicide risk and behavior in Black adolescents. These factors could aim to protect Black adolescents against perceptions of discrimination in order to help them feel less threatened and build feelings of control, empowerment, and hope.

This is the first study to test for this particular association and has the added strength of using a relatively large, nationally representative sample. Yet, this study had several limitations. First, the sizes of the comparison groups are very different and the statistical variance may have played a role in the findings. Second, the YRBS only presented data from 23 states, with state-level sample sizes ranging from 1023 people (in Florida) to 21 (in Maryland) thus, the study does not fully represent a national sample. A third limitation is the time-linking of data. In the current study, police killings of Black people over a six-year period were used to predict 2019 rates of suicide risk and behavior. This choice was made because smaller time units were not available in the YRBS and because I wanted to capture the cumulative impact of exposure on mental health. In contrast, Bor et al.'s (2018) participant data were taken from the U.S. Behavioral Risk Factor Surveillance System (BRFSS) which delineated the exact date of a participant's interview. Thus, Bor et al. (2018) were able to limit their definition of exposure to participants residing in states where police killings of Black Americans had occurred within the three months prior to their interview date. Therefore, it is possible that my definition of exposure was not narrow enough to find broader effects across other indicators of police killings of Black people. Another limitation was my ability to control for potential confounding variables. The YRBS data allowed me to control for race, gender, sexual minority status, and alcohol use, but there are variety of variables that could covary with indirect exposure to police violence, such as socioeconomic status, crime rates, or direct exposure to violence. Furthermore, Black adolescents could be affected by police

killings outside of their state through media exposure. Thus, while the rate of police killings of Black individuals in one's own state may be an important predictor for suicide risk and behavior, it is not necessarily the only influencer.

Future research could solidify indirect exposure to police violence against Black individuals as a race-related stressor by using a different design. Primary national data collections would allow researchers to collect information on specific exposure variables. For example, researchers could assess the method of exposure (social media, traditional media, personal experience), the exact or general time of exposure, and the participant's feelings surrounding the exposure. These details would allow researchers to better understand exactly how indirect exposure to police violence affects Black adolescents as well as whether there is a larger impact if exposure is more direct or if exposure is more recent. Furthermore, researchers could utilize a longitudinal design to uncover whether there is a cumulative effect of exposure to police killings of Black people on Black adolescents and possibly compare long-term effects to short term-effects. Finally, future researchers could also investigate whether there is a difference in the strength of the association for different age groups, since younger adolescents may not be as exposed to police violence or may not understand its impact as much.

Summary and Conclusion

I conducted six multilevel model analyses to investigate whether indirect exposure to police killings of Black individuals is associated with increased suicide risk and behavior among Black adolescents. I found that indirect exposure to police violence was not significantly predictive of suicide risk and behavior, but when indirect exposure to police violence was defined as the rate of Black people killed by police in a state, there was a significant interaction between this rate and race such that Black participants living in states with higher rates of Black police killings reported higher suicide risk and behavior than White participants living in the same states. My research supports past research, specifically that of Bor et al. (2018), which found that exposure to police violence was correlated with increased poor mental health days among Black adults. With Black adolescent suicide attempts having increased 73% since 1991 (Lindsey et al., 2019), it remains pertinent to uncover the risk factors of Black youth suicide. My study illuminates that exposure to police violence against Black individuals may be one of these factors. Future research should focus on understanding whether individual experiences with exposure to police violence against Black individuals can predict suicide risk for Black children and adolescents.

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REFERENCES

- Associated Press. (2017, August 1). *St. Louis officer 'executed' suspect, planted gun in his car, prosecutor says*. NBC News. <https://www.nbcnews.com/news/us-news/st-louis-officer-executed-suspect-planted-gun-his-car-prosecutor-n788626>
- Aymer, S.R. (2016). "I can't breathe": A case study—Helping Black men cope with race related trauma stemming from police killing and brutality. *Journal of Human Behavior in the Social Environment*, 26(3-4), 367-376. <https://doi.org/10.1080/10911359.2015.1132828>
- Bačák, V., & Nowotny, K. M. (2020). Race and the association between police stops and depression among young adults: A research note. *Race and Justice*, 10(3), 363-375. <https://doi.org/10.1177/2153368718799813>
- Bor, J., Venkataramani, A. S., Williams, D. R., & Tsai, A. C. (2018). Police killings and their spillover effects on the mental health of Black Americans: A population-based, quasi-experimental study. *The Lancet (British Edition)*, 392(10144), 302-310. [https://doi.org/10.1016/S0140-6736\(18\)31130-9](https://doi.org/10.1016/S0140-6736(18)31130-9)
- Brody, G. H., Chen, Y., Murry, V. M., Ge, X., Simons, R. L., Gibbons, F. X., Gerrard, M., & Cutrona, C. E. (2006). Perceived discrimination and the adjustment of African American youths: A five-year longitudinal analysis with contextual moderation effects. *Child Development*, 77(5), 1170-1189. <https://doi.org/10.1111/j.1467-8624.2006.00927.x>
- Centers for Disease Control and Prevention. (2019) Youth Risk Behavior Survey Data. Available at: www.cdc.gov/yrbbs.
- Coard, S.I., Sellers, R.M. (2005). African American families as a context for racial socialization. In: V. McLoyd, N. Hill, K. Dodge (Eds.) *Emerging issues in African-American family life: Context, adaptation & policy*. New York: Guilford Press.
- Cooper, S. M., McLoyd, V. C., Wood, D., & Hardaway, C. R. (2008). Racial discrimination and the mental health of African American adolescents. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child*. (pp. 278–312). John Wiley & Sons, Inc.
- Davis, G. Y., & Stevenson, H. C. (2006). Racial socialization experiences and symptoms of depression among black youth. *Journal of Child and Family Studies*, 15(3), 293-307. <https://doi.org/10.1007/s10826-006-9039-8>
- Fenton, J. (2020, January 15). *Baltimore police officer charged in BB gun planting incident as gun trace task force fallout continues*. The Baltimore Sun. <https://www.baltimoresun.com/news/crime/bs-md-ci-cr-gtff-officer-charged-20200115-m3gf7nfx5venzlmxyj7duqxbjm-story.html>
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70(1), 42-57. <https://doi.org/10.1037/h0087722>
- Heffernan, S. (2019, March 22). *Jury awards \$5 million to family alleging Chicago police planted gun after shooting*. WBEZ Chicago. <https://www.wbez.org/stories/jury-awards-5-million-to-family-alleging-chicago-police-planted-gun-after-shooting/ad06fe5f-21cd-4130-9dda-6faf2efeacc3>
- Jackson, F. M., James, S. A., Owens, T. C., & Bryan, A. F. (2017). Anticipated negative police-youth encounters and depressive symptoms among pregnant African American women: A brief report. *Journal of Urban Health*, 94(2), 259-265. <https://doi.org/10.1007/s11524-017-0136-3>
- Jones, S. C. T., & Neblett, E. W. (2017). Future directions in research on racism-related stress and racial-ethnic protective factors for black youth. *Journal of Clinical Child and Adolescent Psychology*, 46(5), 754-766. <https://doi.org/10.1080/15374416.2016.1146991>
- Lambert, S. F., Herman, K. C., Bynum, M. S., & Ialongo, N. S. (2009). Perceptions of racism and depressive symptoms in African American adolescents: The role of perceived academic and social control. *Journal of Youth and Adolescence*, 38(4), 519-531. <https://doi.org/10.1007/s10964-009-9393-0>
- Opara, I., Assan, M. A., Pierre, K., Gunn, J. F., Metzger, I., Hamilton, J., & Arugu, E. (2020). Suicide among Black children: An integrated model of the interpersonal-psychological theory of suicide and intersectionality theory for researchers and clinicians. *Journal of Black Studies*, 51(6), 611-631. <https://doi.org/10.1177/0021934720935641>
- Pleskac, T.J., Cesario, J. & Johnson, D.J. (2018) How race affects evidence accumulation during the decision to shoot. *Psychonomic Bulletin & Review*, 25, 1301–1330. <https://doi-org.libproxy.lib.unc.edu/10.3758/s13423-017-1369-6>
- Ross, C. T. (2015). A multi-level bayesian analysis of racial bias in police shootings at the county-level in the united states, 2011-2014. *PLoS One*, 10(11), e0141854- e0141854. <https://doi.org/10.1371/journal.pone.0141854>
- Simons, R. L., Murry, V., McLoyd, V., Lin, K., Cutrona, C., & Conger, R. D. (2002). Discrimination, crime, ethnic identity, and parenting as correlates of depressive symptoms among African American children: A multilevel analysis. *Development and Psychopathology*, 14(2), 371-393. <https://doi.org/10.1017/S0954579402002109>
- Sinyangwe, S., McKesson, D. & Elzie, J. (2021) Mapping police violence. <https://mappingpoliceviolence.org/>
- Smith Lee, J. R., & Robinson, M. A. (2019). "That's my number one fear in life. It's the police": Examining young Black men's exposures to trauma and loss resulting from police violence and police killings. *Journal of Black Psychology*, 45(3), 143-184. <https://doi.org/10.1177/0095798419865152>
- Tynes, B. M., Willis, H. A., Stewart, A. M., & Hamilton, M. W. (2019). Race-related traumatic events online and mental health among adolescents of color. *Journal of Adolescent Health*, 65(3), 371-377. <https://doi.org/10.1016/j.jadohealth.2019.03.006>