The association between experiencing police arrest and suicide ideation among emerging young adults: Does race matter?

Manik Ahuja1, Kathie Records2, Angela M Haeny3, Eleni M Gavares4 and Hadii M Mamudu1

Abstract
The objective of the study was to examine the association between lifetime arrest and marijuana-related first arrest with past-year suicide ideation among Black and White people. We used data from Wave-IV (2008–2009; N=5114) of the publicly available National Adolescent Health Study (Add Health) data. A total of 4313 Non-Hispanic Black and White participants were selected for this study. Logistic regression was used to assess whether lifetime arrest and marijuana-related arrests were associated with past year suicide. Overall, 28.8% of the sample reported lifetime arrest, 6.3% reported lifetime suicide ideation, and 3.7% reported marijuana-related arrest. A significantly higher percentage of Black people (32.3%) in comparison to White people (27.4%) reported lifetime arrest ($\chi^2 = 9.91; p < 0.001; df = 1$). Among Black people, lifetime arrest (AOR = 2.98; 95% CI, 1.66–5.35; $p < 0.001$) and marijuana-related arrest (AOR = 4.09; 95% CI, 1.47–11.35; $p < 0.001$) were both associated with lifetime suicide ideation. Given the rate of death by suicide among Black people has been rising for two decades, further efforts are needed to educate and inform key stakeholders including law enforcement and policymakers regarding racial disparities in arrests, which may contribute to reducing risk for death by suicide among Black people.

Keywords
policy, psychological distress, race, racism, suicide

Introduction
Racial/ethnic disparities in the legal system in the United States (U.S.) have been well-documented (Hetey and Eberhardt, 2018). Black people experience the greatest number of negative consequences of personal and vicarious police contact compared to other racial/ethnic groups in the U.S. (Baćak and Nowotny, 2020; McFarland et al., 2018; Sewell and Jefferson, 2016). Furthermore, Black people are 3–4 times more likely to experience non-lethal use of force during police contact such as stop-and-frisk stops, and are more likely to report the police force used was “excessive” (Fryer, 2019; Motley et al., 2020). Frequently, the use of police force varies based on the socio-economic demographics of the neighborhood. Racially and ethnically diverse neighborhoods are often targeted at disproportionately higher rates than predominantly White neighborhoods (Sewell and Jefferson, 2016).

Black people are treated with less respect than White people by police on routine stops (Epp et al., 2017) and police officers’ language and tone are less respectful toward Black people (Voigt et al., 2017). They are often targeted by the criminal justice system to a higher degree and are arrested at rates two to three times higher than White people (Mitchell and Caudy, 2015). Although Black people are not more likely than White people to use illicit drugs, they...
are more likely to be arrested or incarcerated for drug-related offenses (Ferrer and Connolly, 2018; Mitchell and Caudy, 2015). Black people were almost four times more likely than White people to be arrested for marijuana despite having similar usage rates (American Civil Liberties Union, 2019; Noonan et al., 2016). Black people are more likely to be stopped by police and searched compared to other racial/ethnic groups (Hetey and Eberhardt, 2018; Robinson, 2017). Given the high-profile police-related deaths of George Floyd in Minnesota in May 2020, Breonna Taylor in Louisville in March 2020, and Elijah McClain in August 2019 in Colorado, among others, and the ensuing mass demonstrations across the country, the disproportionate arrest and maltreatment of Black people in the criminal justice system have become a significant policy, political, and public health concern (Bell, 2020; Krohn and Fox, 2020). There is a critical need for research to inform the public discourse about police accountability and policy/public health initiatives to address such racial disparities in police-related deaths.

Research has shown that any contact with the criminal justice system has negative mental health implications and contributes to living in a “climate of fear” (Sewell and Jefferson, 2016). Even the vicarious witnessing of police violence through media such as social media has been found to increase negative emotions such as sadness, anger, and fear in Black emerging adults (Motley et al., 2020). Further, victims’ perception of “unfair treatment” that involves intrusive or unfair police stops has been associated with trauma and adverse mental health effects (Geller et al., 2014). Verbal harassment or physical force used during the interactions by police may be traumatic for the victim; traumas are known risk factors for mental health problems (Kleber, 2019). Thus, the negative consequences associated with experiencing arrest are of growing concern (Schuck, 2020).

Although arrest, conviction, and incarceration are known to have adverse impacts on the mental health of individuals (Sugie and Turney, 2017), there has been little research on the association of arrest with suicidal behaviors. Suicide rates in the U.S. have been rising consistently over the past two decades (Miron et al., 2019; Reger et al., 2020). A study by Drapeau and McIntosh (2018) showed that the age-adjusted suicide rate in 2018 was the highest since 1941, with racial disparities in suicidal behaviors being a major health/public health concern (Drapeau and McIntosh, 2018). Recent trends reveal disproportionate increases in suicidal behaviors among Black youth relative to other race/ethnic groups (Bridge et al., 2018; Lindsey et al., 2019). According to the Center for Disease Controls and Prevention, rates of completed suicide from Black youth and young adults age <25, increased from 3.4 deaths per 100,000 population in 2014 to 4.8 per 100,000 in 2019. For the same time period, rates for White youth and young adults increased from 5.7 per 100,000 to 6.7 per 100,000 (Centers for Disease Control and Prevention, National Center for Health Statistics, 2020). The increases among Black youth and young adults provided impetus to examine the contributions of police actions to this public health problem.

The aims of the current study were to (a) examine the association between any police arrest (i.e. lifetime arrest) and suicide ideation by race, using a nationally representative sample of Black and White young adults aged 24–32 years, and (b) to assess the association between marijuana related first arrest and suicide ideation. Suicidal ideation is known to consist of thoughts about self-destruction, including the idea that life is not worth living and plans to end one’s own life (Nock et al., 2008). Research shows that one in three people who report lifetime suicide ideation make a suicide plan, and nearly three in four of those with a plan make an actual suicide attempt (Dugas et al., 2012; Nock et al., 2008). As such, suicidal ideation is a strong predictor of subsequent suicide attempts, which suggests that it is imperative to identify pathways to ideation. Given the paucity of research on the interplay of police arrest and suicide ideation, and potential differences across racial/ethnic group, this study has strong potential to inform the public discourse on police accountability and the development of policy/public health measures. Findings from this study will, therefore, contribute to the achievement of the national public health goal to eliminate health disparities under the Healthy People 2030 (Johnson et al., 2020).

Methods
This secondary analysis was conducted using data from the National Adolescent Health Study (Add Health), a longitudinal survey of a nationally representative sample of adolescents in the U.S. from 1994–2008. It aimed to investigate the health trajectories of American adolescents into their adulthood. A sample of 132 schools was chosen across the country using systematic sampling with stratification by region, school size, school type, and ethnicity. All participants provided voluntary written informed consent for participation in all aspects of the Add Health study in accordance with the Institutional Review Board guidelines. We used publicly available cross-sectional data from Wave IV of the study. There were a total of 5114 participants, age 24–32 years (mean age = 29.00 years, SD = 1.78), in the original dataset. Race and ethnicity were self-identified by participants. For the current study, 4313 participants were selected who identified as either “White Non-Hispanic” only (n = 3153) or “Black or African American Non-Hispanic” only (n = 1160). Those who identified as both “White Non-Hispanic” and “Black or African American Non-Hispanic” (n = 75) and other multiracial people who endorsed Black or White (n = 17) were not included in the analysis.
Measures

The primary outcome of interest was suicide ideation in the past year. This was based on responses to the following question: “During the past 12 months, did you ever seriously think about committing suicide?” Responses were coded as a binary variable, with 1 representing “yes,” and 0 representing “no.” Lifetime arrest was indexed based on the following question “Have you ever been arrested?,” and also coded binary. Marijuana arrest was based on the responses to the following question “Were you charged (the first time) for the possession, sale, use, growing, or manufacturing of marijuana/hashish?” First arrest was selected, as it has been applied in previous studies as a proxy for subsequent outcomes (Andersen and Ouellette, 2019; Lau et al., 2018; Tillson et al., 2017).

We included covariates that are associated with suicide behaviors including alcohol use (Pompili et al., 2010), income (Steelesmith et al., 2019), education (Phillips and Hempstead, 2017), health insurance status (Tondo et al., 2006), gender (Lewinsohn et al., 2001), and lifetime depression (Brådvik, 2018). Alcohol use was based on past year alcohol use in response to the following question: “During the past 12 months, how often did you drink beer, wine, or liquor?” with “nearly every day,” “3–5 days a week,” “once or twice a week,” and “2 or 3 times a month” coded as 1 representing 2 or 3 times a month, and 0 for all other responses. Income was used a binary variable, with 1 representing “low income with income ≤$29,999 per year, and 0 representing an income of $30,000 or higher.” The binary education variable was based on high school graduation, with 1 representing not having graduated high school, and “0” representing graduated high school or obtained a GED or high school certificate of completion. Health insurance status was coded binary with 1 representing does not currently have insurance, and 0 representing insurance as derived from the following: “Which of the following best describes your current health insurance situation?” The participant’s sex was self-reported. Lifetime depression was based on the response to the following question: “Has a doctor, nurse or other health care provider ever told you that you have or had depression?” and coded binary.

Analysis

All data cleaning and recoding of variables was conducted in SAS (version 9.4), with analyses conducted in Stata Version 14 (StataCorp LP, College Station, TX, USA). A chi-square test of difference was conducted to assess differences between Black and White people for our outcome variable of suicide ideation and all covariates. Logistic regression was used to assess whether lifetime arrest was associated with the outcome variable, past year suicide ideation. We stratified by race, based on the long-standing literature warning of the dangers of using simple adjustment methods such as linear regression when there is a substantial covariate imbalance (Imbens and Rubin, 2015; Rubin, 1973). As occurred in this sample for socioeconomic status. In the current sample, a significantly higher percentage of Black people (20.9%) reported income of <$30,000 in comparison to White people (12.0%).

Results

Table 1 shows descriptive statistics. Overall, 28.8% of the sample reported any lifetime arrest, 6.3% reported lifetime suicide ideation, and 3.7% reported marijuana related offense at first arrest. Table 2 shows that 16.2% of participants reported lifetime depression. A significantly higher percentage of Black people (32.3%) in comparison to White people (27.4%) reported lifetime arrest ($\chi^2 = 9.91; p < 0.001; df = 1$). No significant race/ethnicity differences were found for marijuana arrest ($p = 0.12$) and suicide ideation ($p = 0.09$).

The adjusted logistic regression models showing the association between lifetime arrest and past year suicide ideation for Black people are shown in Table 3. Lifetime arrest ($AOR = 2.98; 95\% CI, 1.66–5.35; p < 0.001$), depression ($AOR = 5.55; 95\% CI, 3.06–10.55; p < 0.001$), and no access to health insurance ($AOR = 2.07; 95\% CI, 1.14–3.78$);
were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.

In Table 5, we present findings from logistic regression among the Black sample on lifetime marijuana arrest. A positive association was found between marijuana-related arrest and suicide ideation (AOR = 4.09; 95% CI, 1.47–11.35; p < 0.001), were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.

In Table 5, we present findings from logistic regression among the Black sample on lifetime marijuana arrest. A positive association was found between marijuana-related arrest and suicide ideation (AOR = 4.09; 95% CI, 1.47–11.35; p < 0.001), were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.

In Table 5, we present findings from logistic regression among the Black sample on lifetime marijuana arrest. A positive association was found between marijuana-related arrest and suicide ideation (AOR = 4.09; 95% CI, 1.47–11.35; p < 0.001), were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.

In Table 5, we present findings from logistic regression among the Black sample on lifetime marijuana arrest. A positive association was found between marijuana-related arrest and suicide ideation (AOR = 4.09; 95% CI, 1.47–11.35; p < 0.001), were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.

In Table 5, we present findings from logistic regression among the Black sample on lifetime marijuana arrest. A positive association was found between marijuana-related arrest and suicide ideation (AOR = 4.09; 95% CI, 1.47–11.35; p < 0.001), were associated with past year suicide ideation among Black people. The results for the White sample are shown in Table 4. Depression, less than high school education, and no access to health insurance were associated with suicide ideation among White people.
(Bowleg et al., 2020), there is paucity of research on the interplay of police arrest and suicide ideation. This study examined police arrest, (both lifetime for any reason and marijuana related arrest), and suicide ideation among young adults. This study found important and distinct risk factors by race in our stratified models that contributed to suicide ideation among a nationally representative sample. Stratified regression models suggested a positive association of higher suicide ideation among Black people who experienced arrest while among White people there was no significant association.

There are urgent concerns associated with suicidal behaviors among Black people. Between 2001 and 2017, the rates of Black suicide has been rising (Price and Khubchandani, 2019). Because rates of suicides among Black people are lower than rates among White people, assessment of preventive factors and examination of suicide etiology among Black adults have been vastly overlooked. In fact, combined models in which White people are the “gold standard” and used as the “reference” group in most studies is suggested to be a form of racism (Gee et al., 2019). Assessing risk for suicide among Black people specifically may identify unique factors that can be addressed through health interventions and/or policy changes.

Our findings of increased risk for suicide ideation, with both lifetime and marijuana related arrests for Black people as compared with White people, extends findings from prior studies of racial, economic, and gender differences in arrests and their subsequent effect on mental health. Previous research has found that, as compared to White people, a higher proportion of Black men and women reported lifetime experiences of interactions with/from police that included shouting, cursing, the threat of arrest, pushing/grabbing, and being handcuffed (Motley et al., 2020). However, there appear to be gender-based differences in how police aggressions affect mental health with men faring worse than women across ethnic and racial groups (Hirschtick et al., 2019). Scholars have suggested that policies promoting proactive policing to prevent crime in highly disadvantaged neighborhoods, such as stop and frisk laws, have attributed to racial disparities in police contact and arrests (Geller et al., 2014; Motley et al., 2020; Sewell and Jefferson, 2016). Given the findings of this study with regard to the effect of these policies and police practices on the mental health of young Black adults, attention is urgently needed.

A lack of health insurance and its association with suicide behaviors appears to be a potent universal factor (Hester, 2017; Luoma et al., 2002) as treatment options for psychiatric services may be limited. A lack of health insurance is related to income or socioeconomic factors (Courtney Hughes et al., 2010) and these, in turn, may be related to our findings of increased risk for arrest and depression among Black people. This would be consistent with findings from Motley and Joe (2018) that suggest a higher proportion of Black men and women with lower incomes (<$20,000 and $20,000–49,000) have reported being handcuffed during a police encounter (Motley et al., 2020). However, among Black women, those with a higher salary ($50,000 or more) were more likely to experience shouting, cursing, and threats of arrest than Black women of lower-income (Motley et al., 2020).

Thus, our study provides further evidence of the need to better examine the role of gender and socioeconomic status in relation to racial disparities, police contact, and the deleterious consequences to mental health. Race is important to consider when examining the association between police arrests and suicidality because Black people are more likely to have encountered psychosocial stressors and systemic racism (Miller et al., 2013) that affect how interactions with police are perceived and experienced. As our findings illustrate, the impact of these interactions differs by race, with a greater negative impact experienced by Black men and women. Thus, there is a need to address the role of institutional racism and marginalization, such as excessive police force and unnecessary arrests among Black people, to ultimately develop improved suicide prevention interventions.

**Limitations**

Our results should be considered within the limitations of our findings. First, data from this study was cross-sectional, and thus this study is unable to establish temporal relationships. Only past year suicidal ideation was included in this study, thus while we know that the experience of suicidal ideation was in young adulthood, the exact age of its occurrence is unknown. Second, it is unknown at what age the arrest occurred or the time that elapsed between the arrest and experience of suicidal ideation. Future studies are needed to explore the type of police force used in an arrest and subsequent suicidal behaviors. Further, future studies

---

**Table 6. The association between marijuana arrest and past year suicide ideation among White sample (n = 3153).**

| Variable                        | AOR  | 95% CI  |
|---------------------------------|------|---------|
| Marijuana arresta               | 1.74 | [0.93, 3.23] |
| Lifetime depression             | 5.53 | [4.09, 7.48]* |
| Household income: < $30,000     | 1.13 | [0.75, 1.69] |
| Education: < high school        | 1.89 | [1.14, 3.16]* |
| Health insurance: none          | 1.62 | [1.16, 2.26]* |
| Past year alcohol use           |      |         |
| ⩾ 2–3 times/monthb              | 1.15 | [0.80, 1.63] |
| < 2–3 times a month             | 1.04 | [0.73, 1.47]* |
| Female                          | 0.81 | [0.59, 1.11] |
| Age                             | 0.97 | [0.85, 1.05] |

AOR: adjusted odds ratio; CI: confidence interval.

*aMarijuana related offense at first arrest.

*bAlcohol use 2–3 times a month or more.

*Significant (p < 0.05).
should examine how the type of force used during arrest may mediate mental health risk factors for depression and traumatic stress. Third, more knowledge is needed on the role of gender and socioeconomic status with police force during arrests and the subsequent impact on suicidal behavior. Fourth, the data analyzed in our study is from 2008. The overall political climate and attitudes about racial injustice may have changed since 2008. However, police brutality and harsh arrests toward Black people are not novel, and in fact have been at the forefront in the U.S. since the institution of policing in the South. This topic may have received greater visibility in the last decade due to mass media, social media, and other factors (Alang et al., 2017; Miller and Vittrup, 2020). Fifth, there are limitations from the use of secondary data, as the questions posed do not necessarily reflect the aims of the original study. For example, the dataset only queries participants about suicidal ideation in the last 12 months and does not consider other measures such as lifetime ideation, or date of first/last suicide ideation. Sixth, the survey uses the word “committing” when asking about past year suicidal ideation. In suicide research, the use of the word “committing” recognized as an outdated and stigmatizing word which associates suicide with a criminal act (Howell et al., 2021; Nielsen et al., 2016). Furthermore, perceived stigma related to suicide is suggested to contributed to reduced disclosure of suicidal behavior (Fulginiti and Frey, 2018; Fulginiti et al., 2020). Future suicide-related research examining the role of justice involvement should consider tailored survey questions that align more closely with the research question of interest and de-stigmatizing language related to suicidal ideation and suicide attempts. Nevertheless, given the paucity of studies on police arrest and suicide ideation and the role of race in such relations, the results of this study have strong policy/public health implications that can inform public discourse on the disparate impacts of police arrest and incarceration in the U.S.

Public health implications

The findings reveal that there are adverse consequences associated with experiencing arrest among Black young adults, including suicidal ideation. As suicide rates for Black people have been rising for the last two decades (Lindsey et al., 2019), it is important to identify contributing factors. It has been well established that Black people are significantly more likely to experience police brutality than are White people (Alang et al., 2017). Further efforts to educate and inform key stakeholders including law enforcement, policymakers, and government officials are necessary. Further research is warranted in this area to identify actions during an arrest that may contribute to these adverse outcomes and interventions needed to lessen suicidal behaviors.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs

Manik Ahuja https://orcid.org/0000-0002-3446-9216
Angela M Haeny https://orcid.org/0000-0003-3004-6977

References

Alang S, McAlpine D, McCreedy, E, et al. (2017) Police brutality and black health: Setting the agenda for public health scholars. American Journal of Public Health 107(5): 662–665.
American Civil Liberties Union (2019) Marijuana arrests by the numbers. American Civil Liberties Union. Available at: https://www.aclu.org/gallery/marijuana-arrests-numbers (accessed 9 August 2020).
Andersen TS and Ouellette HM (2019) Juvenile court outcomes following youth’s first arrest: A national test of the racial and ethnic threat hypothesis. Crime and Delinquency 65(2): 183–214.
Bačak V and Nowotny KM (2020) Race and the association between police stops and depression among young adults: A research note. Race and Justice 10(3): 363–375.
Bell E (2020) Alex Golshani: The George Floyd protests in New York. Yale Review 108(2): 45–55.
Bowleg L, del Río-González AM, Mbabu M, et al. (2020) Negative police encounters and police avoidance as pathways to depressive symptoms among US Black men, 2015–2016. American Journal of Public Health 10(Suppl. 1): S160–S166.
Brádvik L (2018) Suicide risk and mental disorders. International Journal of Environmental Research and Public Health 15(9): 2028.
Bridge JA, Horowitz LM, Fontanella CA, et al. (2018) Age-related racial disparity in suicide rates among US youths from 2001 through 2015. JAMA Pediatrics 172(7): 697–699.
Centers for Disease Control and Prevention, National Center for Health Statistics (2020) Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999-2019, as compiled from data provided by the 57 Vital Statistics jurisdictions through the Vital Statistics Cooperative Program. Available at: http://wonder.cdc.gov/ucd-icd10.html (accessed 13 May 2021).
Courtney Hughes M, Hannon PA, Harris JR., et al. (2010) Health behaviors of employed and insured adults in the United States, 2004-2005. American Journal of Health Promotion 24(5): 315–323.
Drapeau C and McInstosh J (2018) No Title. U.S.A. Suicide: 2018 Official Final Data. Published 2020. Available at: https://suicideology.org/wp-content/uploads/2020/02/2018datapgsv2_Final.pdf (accessed 8 August 2020).


Dugas E, Low NCP, Rodriguez D, et al. (2012) Early predictors of suicidal ideation in young adults. Canadian Journal of Psychiatry 57(7): 429–436.

Epp CR, Maynard-Moody S and Haider-Markel D (2017) Beyond profiling: The institutional sources of racial disparities in policing. Public Administration Review 77(2): 168–178.

Ferrer B and Connolly JM (2018) Racial inequities in drug arrests: Treatment in lieu of and after incarceration. American Journal of Public Health 108(8): 968–969.

Fryer RG (2019) An empirical analysis of racial differences in police use of force. Journal of Political Economy 127(3): 701423.

Fulginiti A and Frey LM (2018) Suicide attempt survivorship and designation as a concealable stigmatized identity. Families in Society 99(3): 193–208.

Fulginiti A, Hsu H-T, Barman-Adhikari A, et al. (2020). Few do and to few: Disclosure of suicidal thoughts in friendship networks of young adults experiencing homelessness. Archives of Suicide Research. Epub ahead of print 23 July 2020. DOI: 10.1080/13811118.2020.1795018.

Gee GC, Hing A, Mohammed S, et al. (2019) Racism and the life course: Taking time seriously. American Journal of Public Health 109(Suppl. 1): S43–S47.

Geller A, Fagan J, Tyler T, et al. (2014) Aggressive policing and the mental health of young urban men. American Journal of Public Health 104(12): 2321–2327.

Hester RD (2017) Lack of access to mental health services contributing to the high suicide rates among veterans. International Journal of Mental Health Systems 11: 47.

Hetey RC and Eberhardt JL (2018) The numbers don’t speak for themselves: Racial disparities and the persistence of inequality in the criminal justice system. Current Directions in Psychological Science 27(3): 183–187.

Hirschtick JL., Homan SM, Rauscher G, et al. (2019) Persistent and aggressive interactions with the police: Potential mental health implications. Epidemiology and Psychiatric Sciences 29: e19.

Howell AJ, Cowan-Nelson ERH and Cobuz VD (2021) Depicted immorality influences the perceived applicability of the phrase “committed suicide”. Crisis. Epub ahead of print 23 February 2020. DOI: 10.1027/0227-5910/a00076.

Imbens GW and Rubin DB (2015) Causal inference: For statistics, social, and biomedical sciences an introduction. Cambridge, England: Cambridge University Press.

Johnson S, Gold MR and Baciu A (2020) Rethinking the leading health indicators for healthy people 2030. JAMA Health Forum 1(5): e200426.

Kleber RJ (2019) Trauma and public mental health: A focused review. Frontiers in Psychiatry 10: 451.

Krohn M and Fox B (2020) Causes and effects of racial disparity in the criminal justice system. Justice Quarterly 37(5): 761–762.

Lau KSL, Rosenman MB, Wiehe SE, et al. (2018) Race/ethnicity, and behavioral health status: First arrest and outcomes in a large sample of juvenile offenders. Journal of Behavioral Health Services and Research 45: 237–251.

Lewinsohn PM, Rohde P, Seeley JR, et al. (2001) Gender differences in suicide attempts from adolescence to young adulthood. Journal of the American Academy of Child and Adolescent Psychiatry 40(4): 427–434.

Lindsay MA, Sheftall AH, Xiao Y, et al. (2019) Trends of suicidal behaviors among high school students in the United States: 1991–2017. Pediatrics 144(5): e20191187.

Luoma JB, Martin CE and Pearson JL (2002) Contact with mental health and primary care providers before suicide: A review of the evidence. American Journal of Psychiatry 159(6): 908–916.

McFarland MJ, Taylor J, McFarland CAS, et al. (2018) Perceived unfair treatment by police, race, and telomere length: A Nashville community-based sample of Black and White men. Journal of Health and Social Behavior 59(4): 585–600.

Miller B, Rote SM and Keith VM (2013) Coping with racial discrimination: Assessing the vulnerability of African Americans and the mediated moderation of psychosocial resources. Society and Mental Health 3(2): 133–150.

Miller C and Vittrup B (2020) The indirect effects of police racial bias on African American families. Journal of Family Issues 41(10): 1699–1722.

Miron O, Yu KH, Wilf-Miron R, et al. (2019) Suicide rates among adolescents and young adults in the United States, 2000–2017. Journal of the American Medical Association 321(23): 2362–2364.

Mitchell O and Caudy MS (2015) Examining racial disparities in drug arrests. Justice Quarterly 32(2): 288–313.

Motley RO, Chen Y-C, Johnson C, et al. (2020) Exposure to community-based violence on social media among Black male emerging adults involved with the criminal justice system. Social Work Research 44(2): 87–97.

Motley RO Jr and Joe S (2018) Police use of force by ethnicity, sex, and socioeconomic class. Journal of the Society for Social Work and Research 9(1): 49–67.

Nielsen E, Padmanathan P and Knipe D (2016) Commit* to change? A call to end the publication of the phrase ‘commit* suicide’. Wellcome Open Research 1: 21.

Nock MK, Borges G, Bromet EJ, et al. (2008) Suicide and suicidal behavior. Epidemiologic Reviews 30(1): 133–154.

Noonan AS, Velasco-Mondragon HE and Wagner FA (2016) Improving the health of African Americans in the USA: An overdue opportunity for social justice. Public Health Reviews 37: 12.

Phillips JA and Hempstead K (2017) Differences in U.S. suicide rates by educational attainment, 2000–2014. American Journal of Preventive Medicine 53(4): E123–E130.

Pompili M, Serafini G, Innamorati M, et al. (2010) Suicidal behavior and alcohol abuse. International Journal of Environmental Research and Public Health 7(4): 1392–1431.

Price JH and Khubchandani J (2019) School firearm violence prevention practices and policies: Functional or folly? Violence and Gender 6(3): 154–167.

Reger MA, Stanley IH and Joiner TE (2020) Suicide mortality and coronavirus disease 2019 - A perfect storm? In JAMA Psychiatry 77(11): 1093–1094.

Robinson MA (2017) Black bodies on the ground: Policing disparities in the African American community - An analysis of newsprint from January 1, 2015 through December 31, 2015. Journal of Black Studies 48(6): 551–571.

Rubin DB (1973) The use of matched sampling and regression adjustment to remove bias in observational studies. Biometrics 29(1): 185–203.
Schuck AM (2020) Examining the community consequences of arrests for low-level criminal activity. *Journal of Community Psychology* 48(1): 86–103.

Sewell AA and Jefferson KA (2016) Collateral damage: The health effects of invasive police encounters in New York City. *Journal of Urban Health* 93: 42–67.

Steelesmith DL, Fontanella CA, Campo JV, et al. (2019) Contextual factors associated with county-level suicide rates in the United States, 1999 to 2016. *JAMA Network Open* 2(9): e1910936.

Sugie NF and Turney K (2017) Beyond incarceration: Criminal justice contact and mental health. *American Sociological Review* 82(4): 719–743.

Tillson M, Strickland JC and Staton M (2017) Age of first arrest, sex, and drug use as correlates of adult risk behaviors among rural women in jails. *Women and Criminal Justice* 82(4) 719–743.

Tondo L, Albert MJ and Baldessarini RJ (2006) Suicide rates in relation to health care access in the United States: An ecological study. *Journal of Clinical Psychiatry* 67(4): 517–523.

Voigt R, Camp NP, Prabhakaran V, et al. (2017) Language from police body camera footage shows racial disparities in officer respect. *Proceedings of the National Academy of Sciences of the United States of America* 114(25): 6521–6526.