Article

Race and the Association Between Police Stops and Depression Among Young Adults: A Research Note

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Abstract

Police stops are stressful experiences that may be harmful for health. The present study examines the association between police stops and symptoms of depression in the National Longitudinal Survey of Adolescent to Adult Health. The study sample included non-Hispanic Black ($n = 2,118$) and White ($n = 5,629$) adults aged 18–26 years surveyed in 1996 and 2001/2002. Both Black and White young adults who have been stopped by police had more symptoms of depression compared to their never stopped counterparts. Among Blacks, the association was attenuated but persisted after controlling for criminal behavior and justice contact. In contrast, among Whites, the association between police stops and depression was smaller in magnitude, and it was explained by self-reported criminal behavior. Given the frequency and the number of people in contact with police, we point to the need to sensitize police departments to potential mental health consequences of proactive policing, and the decreased willingness of the public to seek police help as a result of previous distressing encounters.

Keywords

police stops, race, depression, young adults

Given the frequency with which civilians are stopped by police officers, and the stressful nature of these interactions, it is crucial to understand their implications for public well-being. Scholars have long recognized that policing practices have a role in

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how the public perceives law enforcement, but a broader interest in the collateral consequences of policing has been more recent. Emerging public health studies suggest that experiencing a police stop might lead to worse mental health (e.g., Geller, Fagan, Tyler, & Link, 2014). Yet, existing studies have been restricted to major cities in northeastern United States, they have not been able to control for prior mental health and have not accounted for prior criminal behavior and justice contact. In this study, we use the National Longitudinal Study of Adolescent to Adult Health to assess the association between police stops and symptoms of depression, and whether the association remains after controlling for a critical confounder—prior symptoms of depression. We also examine to what extent criminal behavior and justice contact account for the association. At the heart of our analysis is assessing the heterogeneous role of race.

Collateral Consequences of Police Contact

Traditionally, policing practices have been considered in terms of how effective they are in responding to crime while modern models of policing emphasize a proactive approach to crime prevention and community engagement. The modern approach involves more frequent interactions with the public, many of which are involuntary. When these interactions are unsatisfactory, they create potential for confrontation and unfavorable views of law enforcement. Discriminatory, disrespectful, and unfair police stops may produce resentment and make compliance during police–public encounters hard to ensure (Reisig, 2010; Sunshine & Tyler, 2003). They may also open space for violence that could otherwise have been avoided. In the United States, who gets stopped by police is racially patterned (Gelman, Fagan, & Kiss, 2007; Lundman & Kaufman, 2003) and has implications for law enforcement beyond its ability to control crime.

As a result of proactive policing, minority communities may feel disenfranchised and form a negative view of law enforcement (Muller & Schrage, 2014; Rengifo & Fratello, 2015). Moreover, encounters with police officers by minority individuals are more likely to be confrontational and include the use of force (Hickman, Piquero, & Garner, 2008). Policing also tends to be reactionary in a manner that harms the African American community, in particular. A recent study found that fatal shootings of police officers by Black suspects increased the use of force against Blacks in the days after the shootings—but the same was not the case for White and Hispanic residents (Legewie, 2016). Racial disproportionately of police stops has been amply documented in New York City. Even though crime has declined since the early 1990s, involuntary police encounters have increased disproportionately among race/ethnic minority residents, even after taking into account racial differences in criminal involvement, while remarkably few stops have met the requirement of "reasonable suspicion" (Gelman et al., 2007; Goel, Rao, & Shroff, 2016).

Policing and Health

When considered from the perspective of stress research in medical sociology and social epidemiology, police stops can be considered as acute stressors (Thoits, 2010).

Prior research has considered a range of explanations for why experiencing a police stop can have an impact on health (Alang, McAlpine, McCreedy, & Hardeman, 2017; Cooper & Fullilove, 2016; DeVylder, 2017; Krieger, Chen, Waterman, Kiang, & Feldman, 2015). First, if the encounter involved the use of force or verbal harassment, it may have been experienced as traumatic—and traumas are known risk factors for poor mental health. Second, even if the stop did not involve physical or verbal violence, it can still be harmful because of the fear of police and potential criminal justice consequences of the interaction. As others have noted, reactions to police contact can include fear of being perceived a criminal and hypervigilance, which in turn may produce adverse physiological effects (Sewell & Jefferson, 2016).

The association between police stops and depressive symptoms may be different for Whites and Blacks. For one, Black young adults might experience worse psychological outcomes as a result of police stops because encounters with police are more likely to involve force when the civilian is Black (Kahn, Goff, Lee, & Motamed, 2016; Ross, 2015). In addition, there is evidence that racial disparity emerges in situations of compliance rather than resistance—Black suspects are more likely to be shot at in situations of compliance than Whites, whereas there appears to be no difference in situations of resistance (Garner, Maxwell, & Heraux, 2002). Moreover, once arrested, Black residents tend to be treated more harshly by the criminal justice system, therefore having more reason to be anxious about the potential consequences of their interactions with law enforcement (Spohn, 2015).

Decisions that underlie racially disparate treatment are not always a result of overt or explicit racism—they are also driven by implicit bias (Spohn 2015; Sampson & Lauritsen 1997). Social psychological research has documented that actors across the criminal justice system—police officers, jury, and judges—engage in subtle and unconscious discrimination based on race by associating blackness with criminality (Kang et al., 2012). There is evidence from experimental studies, for instance, that police officers are more likely to shoot unarmed Black targets who appeared with non-gun objects, and to not shoot White targets who appeared with a gun (Plant & Peruche, 2005). These studies suggest—along the lines of what qualitative research has found—that young Black men might be treated more harshly during police stops (Brunson & Miller, 2006).

While there is some variation with regard to outcomes and patterns of association in prior research, police stops have been linked to worse health at both the individual and the aggregate level. A comprehensive survey of adults in Baltimore, New York City, Philadelphia, and Washington, DC, found that virtually all forms of police violence—psychological, physical, sexual, and neglectful treatment—were related to psychological distress and depression (DeVylder et al., 2017). Two studies based in New York City have documented similar results. The first study has linked neighborhood-level stop and frisk and police use of force rates with psychological distress among men (Sewell & Jefferson, 2016). The second found that even relatively minor or nonviolent police stops were associated with a greater number of symptoms of anxiety and posttraumatic stress disorder (Geller et al., 2014).

These studies provide compelling evidence for possible mental health consequences of police stops in the United States, but all have been restricted to major cities in the Northeast. Furthermore, individual-level studies have used cross-sectional data that did not allow researchers to control for prior mental health. Persons with mental illness might be more likely to come into contact with police, and these encounters might carry more potential for confrontation because of little mental health training among police officers (Morabito, 2007). In the present study, we examine the association between police stops and symptoms of depression in a nationally representative sample, and we control for prior depression. In addition, we consider two variables that may explain this association—history of criminal behavior and justice contact (Piquero, Farrington, Nagin, & Moffitt, 2010; Wildeman & Muller, 2012).

Method

Data

The analysis is based on panel data from the National Longitudinal Study of Adolescent to Adult Health (Add Health). A sample of 80 high schools and 52 middle schools from the United States was selected with unequal probability of selection. Incorporating systematic sampling methods and implicit stratification into the Add Health study design ensured this sample is representative of U.S. schools with respect to region of country, urbanicity, school size, school type, and ethnicity. The first wave of data collection took place from September 1994 through December 1995, and it included 20,745 participants enrolled in school grades 7–12. The second wave of data collection occurred in 1996 and the third between 2001 and 2002. The data were collected using face-to-face interviews in participants' homes. We used data from the third wave, although demographic characteristics were assessed in the first wave. Our analysis sample included non-Hispanic Black ($n = 2,118$) and White ($n = 5,629$) young adults aged 18–26 years. The full sample size was 8,565 with less than 10% missing cases ($n = 818$); therefore, we performed listwise deletion (Allison, 2001), and the resulting analysis sample size was 7,747.

Measures

The dependent variable—depressive symptomatology—was measured using the Center for Epidemiological Studies Depression Scale (CES-D). The 9 items included questions such as enjoying life and feeling disliked during the past 7 days. Responses were recorded on a 4-point scale: $0 = $ *never or rarely*, $1 = $ *sometimes*, $2 = $ *a lot of the time*, $3 = $ *most of the time or all of the time*. Responses were summed to produce an index where higher scores indicated more symptoms of depression (range: 0–25).

The focal independent variable was based on asking participants how many times they have been stopped or detained by the police for questioning about their activities, not including minor traffic violations. Control variables included gender, highest grade completed, and a binary variable describing criminal activity that included both violent and nonviolent criminal behavior. We also controlled for whether participants

had ever been arrested or convicted of a crime as a juvenile. To control for prior depression, we used the CES-D score assessed during the second round of Add Health data collection in 1996.

Analytic Strategy

Ordinary least squares (OLS) regression with robust standard errors was used to estimate the association between police stops and depressive symptoms. All the analyses were adjusted for complex survey design using the recommended survey weights (see Chen & Chantala, 2014). The weights take into account clustering of participants within schools and the stratified nature of the sample.

All models we present were estimated separately by race. The first set of analyses focused on a binary indicator of police stops that distinguished people who have been stopped one or more time versus people who have never been stopped. The second examined the count of police stops as the focal independent variable. In each set of analyses, the first model adjusted for demographic covariates and prior depression score while the second controlled for the full set of covariates that included criminal behavior, history of arrest, and juvenile conviction. To assess race differences in the association between police stops and depression, we estimated a Race × Police Stop interaction term in the fully adjusted regression models with the sample that combined both race groups. We also examined gender differences in the relationship between police stops and depression score by estimating an interaction term between gender and police stops.

Results

Table 1 presents summary statistics, stratified by having been stopped by police. It appears that, for most covariates, there are no major differences between the two groups on demographic covariates—age, race, and educational attainment—except for gender. Men are represented in a much greater proportion among those having been stopped by police. The two groups are also virtually indistinguishable on the depression scores. Major differences emerge with respect to criminal behavior and justice contact. The proportion of young adults who reported engaging in criminal behavior is almost twice as large in the group stopped by police than among those never stopped by police (0.646 vs. 0.336). Young adults who have not been stopped by police have no reported histories of arrest and juvenile conviction.

Table 2 presents multiple OLS regression models stratified by race. The first two models are based on a binary measure of police stops, and the last two are based on the number of stops. As model 1 shows, being stopped by police was associated with an increase in symptoms of depression among young Black adults ($b = 1.32$, $p < .001$). This association persisted when controlling for criminal behavior and justice contact (Model 2). The association between being stopped by police and depression for young White adults was smaller (Model 5), and it was explained away by criminal behavior (Model 6). Models were estimated with the full sample of youth including an

Table 1. Summary Statistics.

Variables	Ever Stopped by Police Mean (SE)	Never Stopped by Police Mean (SE)	Full Sample Mean (SE)
Age	21.420 (.119)	21.225 (.140)	21.379 (.121)
Female	0.261	0.568	0.503
Non-Hispanic Black	0.165	0.189	0.184
Highest grade completed	12.908 (.104)	13.096 (.091)	13.057 (.089)
Criminal behavior (past 12 months)	0.646	0.336	0.402
Convicted of offense as juvenile	0.113	0	0.024
Ever arrested	0.577	0	0.122
Number of times stopped by police (continuous)	1.864 (.037)	0	0.394 (.020)
Number of times stopped by police (categorical)			
Never	0	1	0.788
1 time	0.454	0	0.096
2 or 3 times	0.337	0	0.071
4 or 5 times	0.098	0	0.021
6 or more times	0.110	0	0.023
Depression (wave 3)	4.301 (.078)	4.676 (.120)	4.381 (.071)
Depression (wave 2)	5.471 (.087)	5.398 (.137)	5.456 (.079)
N	1,639	6,108	7,747

Note: Data are from the National Longitudinal Study of Adolescent to Adult Health. *SE* = standard error.

interaction term for being stopped by police and race (not shown). In the full multivariate model, being stopped by police was associated with depression to a greater extent among young Black adults than among their White counterparts ($b = 0.84$, $p < .01$).

We also examined whether the count of police stops was associated with depression. Whereas the association was significant in both groups in the first set of models (Models 3 and 7), the association was no longer significant when adjusting for the full set of covariates (Models 4 and 8). Additional models with the full sample (not shown) confirmed that the interaction term between race and the count of police stops was not significant controlling for criminal behavior ($b = 0.23$, $p = .114$). Similarly, we found no statistically significant interaction between police stops and gender (not shown).

Multiple regression models presented in Table 2 were also estimated with alternative specifications of depression including a clinical threshold (≥ 10) and a symptomatology count (not shown). These results are reported in the Supplemental Material. The negative binomial models produced similar results. The interaction term for Race × Police Stop in the full model remained statistically significant. In the model where clinical depression was considered as a binary variable, the interaction between race and police stops was not significant. However, the CES-D was originally designed to measure depressive symptomatology and not as a clinical diagnostic tool

Table 2. Association Between Police Stops and Depression for Non-Hispanic Black and White Young Adults.

Variables	Black Young Adults				White Young Adults			
	Model 1 b (SE)	Model 2 b (SE)	Model 3 b (SE)	Model 4 b (SE)	Model 5 b (SE)	Model 6 b (SE)	Model 7 b (SE)	Model 8 b (SE)
Stopped by the police at least once	1.32*** (0.30)	1.12** (0.43)			0.37** (0.13)	0.08 (0.19)		
Depression (round 2)	0.33*** (0.02)	0.32*** (0.02)	0.32*** (0.02)	0.32*** (0.02)	0.31*** (0.02)	0.31*** (0.02)	0.31*** (0.02)	0.31*** (0.02)
Age	−0.00 (0.09)	0.01 (0.09)	−0.01 (0.09)	0.01 (0.09)	−0.11** (0.04)	−0.10** (0.04)	−0.11** (0.04)	−0.10** (0.04)
Female	0.74*** (0.26)	0.82** (0.27)	0.70* (0.27)	0.80** (0.27)	0.53*** (0.11)	0.66*** (0.12)	0.57*** (0.11)	0.68*** (0.12)
Highest grade completed	−0.24*** (0.06)	−0.23*** (0.06)	−0.24*** (0.06)	−0.23*** (0.06)	−0.12*** (0.03)	−0.11*** (0.03)	−0.12*** (0.03)	−0.11*** (0.03)
Offending		0.96*** (0.23)		0.99*** (0.24)		0.62*** (0.13)		0.60*** (0.14)
Convicted of offense as juvenile		−0.46 (0.97)		−0.49 (0.96)		0.30 (0.48)		0.20 (0.48)
Ever arrested		−0.07 (0.48)		0.41 (0.48)		0.21 (0.27)		0.00 (0.27)
Number of times stopped by the police			0.48** (0.15)	0.27 (0.22)			0.25*** (0.06)	0.17 (0.10)
Constant	5.42** (1.81)	4.69** (1.75)	5.63** (1.81)	4.77** (1.77)	6.21*** (0.83)	5.64*** (0.85)	6.09*** (0.82)	5.53*** (0.84)
N	2,118	2,118	2,118	2,118	5,629	5,629	5,629	5,629
R^2	.147	.159	.143	.157	.132	.138	.134	.139

Note. Standard errors are in parentheses. b = unstandardized ordinary least square regression coefficient. SE = standard error.
*$p < .05.$ **$p < .01.$ ***$p < .001.$

(Radloff, 1977). Recent evaluations also caution against using CES-D as a stand-alone measure for diagnostic purposes (Vilagut, Forero, Barbaglia, & Alonso, 2016).

Discussion and Conclusion

Police stops in the United States take place on a large scale, and growing public health research indicates that these interactions might have implications for mental health (Eith & Durose, 2011; Geller et al., 2014). The current study provides evidence at the national level that police stops are associated with depressive symptoms. More specifically, having been stopped by police was related to a higher number of symptoms of depression among both White and Black young adults even after controlling for prior depression. While the association remained after accounting for criminal behavior and justice contact among Blacks, the association was fully explained by self-reported criminal behavior among Whites. Our findings support the notion that racial disparities in police stops may have a racially disparate influence on the mental health of young adults (Garner et al., 2002). However, we did not find an association with the frequency of stops—perhaps because people who have been stopped multiple times have developed strategies to manage the encounter which help minimize potential harm.

It is important to consider public health implications of our findings. In particular, we want to draw attention to two issues. First, police departments need to be sensitized to the potential mental health consequences of proactive policing, especially with young Black men. Second, the public might be more reluctant to seek police help as a result of previous distressing encounters. This might apply especially to people who have not been arrested or charged with a crime as a result of a police stop and thus may feel less safe and trusting toward law enforcement. In addition, given that police violence tends to co-occur with other forms of victimization, police stops may further exacerbate the harmful effects of prior traumatic experiences, especially among women (Fedina et al., 2018). Our results may also have implications for the large body of research that documents the effect of incarceration on health by showing that mental health might have been affected during these earlier points of contact with the criminal justice system.

Racial inequality is a defining feature of the criminal justice system in the United States (Sampson & Lauritsen, 1997; Spohn, 2015). Compared to their White counterparts, Black men and women disproportionately experience criminal justice contact (Brame, Bushway, Paternoster, & Turner, 2014; Lyons & Pettit, 2011). Yet racial disparities in contact are not only quantitative, they are also different qualitatively. Studies show that police officers tend to interact with Black youth in a more intrusive, less procedurally just and legally justified manner (Brunson & Miller, 2006; Rengifo & Fratello, 2015). These interactions are also more likely to involve physical contact, especially in the form of frisking and searching, as well as the use of physical force (Gelman et al., 2007; Plant & Peruche, 2005). Such racially disparate treatment may help explain why police stops appear to be more traumatic and harmful for Black youth compared to their White peers.

To what extent can we interpret our findings as causal? Unlike most prior individual-level studies, we were able to control for a richer set of relevant confounders, including other forms of contact with the justice system and criminal behavior. We also controlled for prior depression but—given that our question asked about *ever* being stopped by police—its measurement might have occurred after the stop. Our estimates may therefore likely be conservative if depression in the second round mediated the effect of police contact on depression in the third round of data collection. The lack of clear temporal ordering limits our ability to make causal claims, even though we are better positioned to speak to causality relative to prior research on police stops and mental health. Future research should be mindful of this issue and collect longitudinal data that enable more credible causal claims.

While we have addressed confounding by controlling for prior symptoms of depression, we were not able to account for changes in mental health that might have occurred between the two rounds of data collection. We also have no information on the nature of the encounter—whether, for instance, it involved the use of force or whether the person was treated fairly. Recent work has documented that perceived fairness and violence are mechanisms by which policing can affect health (DeVylder et al., 2017; Geller et al., 2014). In addition, concentrated police stops, especially in disadvantaged Black communities, likely increase feelings of powerlessness, strain the relationship between police and the public, and diminish perceptions of gains made by the civil rights movement—all of which can help explain why being stopped by police is related to poor mental health (Alang et al., 2017).

Because Add Health data have been collected in early 2000s, we should note the implications that the changes over the past 20 years might have had for the extent to which our findings apply today. Technology now plays a greater role in the relationship between police and the public, especially the use of smartphones to record police actions, and the increasing presence of body cameras. These technological changes—and the accompanying media attention—might have made police more cautious in how they interact with the public. Police officers, however, continue to be socialized into an occupational culture that emphasizes danger and suspicion toward the public (Sierra-Arévalo, 2016; Silver, Roche, Bilach, & Bontrager Ryon, 2017). As a result, police violence remains a regular occurrence. It is not clear to what extent these changes have influenced how police stops affect the well-being of young people of color—while they might feel more confident during interactions with police, they might also experience more distress as a result of widely publicized images of police brutality.

Today, in the midst of a political turn that aims to reorient law enforcement toward "tough on crime" approaches (Sessions, 2017), research on the public health implications of policing is as necessary as ever. While the technological changes in policing over the past 20 years suggest that our findings might overestimate the contemporary mental health effects of policing, the recent punitive turn in law enforcement suggests they may be underestimated. These two trends indicate a need for new data collection efforts to examine how policing is related to mental health. At the same time, public health scholars who study racial disparities should consider routinely collecting data on police stops as a social determinant of health. Our finding that the association

between police stops and depressive symptoms exists at the national level and not only in urban areas such as New York City highlights the potential public health consequences of policing nationally. Given the sheer number of people in contact with police daily, law enforcement policies and practices need to be considered with public health in mind—especially given that the vast majority of individuals stopped by police are not arrested (Lum & Nagin, 2017). As others have noted recently (Shepherd & Sumner, 2017), policing and public health can and should work in partnership rather than opposition.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

References

Alang, S., McAlpine, D., McCreedy, E., & Hardeman, R. (2017). Police brutality and Black health: Setting the agenda for public health scholars. *American Journal of Public Health*, *107*, 662–665. doi:10.2105/AJPH.2017.303691

Allison, P. D. (2001). *Missing data*. Thousand Oaks, CA: Sage.

Brame, R., Bushway, S. D., Paternoster, R., & Turner, M. G. (2014). Demographic patterns of cumulative arrest prevalence by ages 18 and 23. *Crime & Delinquency*, *60*, 471–486.

Brunson, R. K., & Miller, J. (2006). Young Black men and urban policing in the United States. *British Journal of Criminology*, *46*, 613–640. doi:10.1093/bjc/azi093

Chen, P., & Chantala, K. (2014). *Guidelines for analyzing Add Health data*. Chapel Hill, NC: Carolina Population Center.

Cooper, H. L. F., & Fullilove, M. (2016). Editorial: Excessive police violence as a public health issue. *Journal of Urban Health*, *93*, 1–7. doi:10.1007/s11524-016-0040-2

DeVylder, J. E. (2017). Donald Trump, the police, and mental health in US cities. *American Journal of Public Health*, *107*, 1042–1043. doi:10.2105/AJPH.2017.303827

DeVylder, J. E., Frey, J. J., Cogburn, C. D., Wilcox, H. C., Sharpe, T. L., Oh, H. Y., . . . Link, B. G. (2017). Elevated prevalence of suicide attempts among victims of police violence in the USA. *Journal of Urban Health*, *94*, 629–636. doi:10.1007/s11524-017-0160-3

Eith, C., & Durose, M. R. (2011). *Contacts between police and the public, 2008*. Washington, DC: U.S. Department of Justice.

Fedina, L., Backes, B. L., Jun, H.-J., Shah, R., Nam, B., Link, B. G., & DeVylder, J. E. (2018). Police violence among women in four U.S. cities. *Preventive Medicine*, *106*, 150–156. doi: 10.1016/J.YPMED.2017.10.037

Garner, J. H., Maxwell, C. D., & Heraux, C. G. (2002). Characteristics associated with the prevalence and severity of force used by the police. *Justice Quarterly*, *19*, 705–746. doi:10.1080/07418820200095401

Geller, A., Fagan, J., Tyler, T., & Link, B. G. (2014). Aggressive policing and the mental health of young urban men. *American Journal of Public Health*, *104*, 2321–2327.

Gelman, A., Fagan, J., & Kiss, A. (2007). An analysis of the New York City police department's "stop-and-frisk" policy in the context of claims of racial Bias. *Journal of the American Statistical Association*, *102*, 813–823. doi:10.1198/016214506000001040

Goel, S., Rao, J. M., & Shroff, R. (2016). Precinct or prejudice? Understanding racial disparities in New York City's stop-and-frisk policy. *The Annals of Applied Statistics*, *10*, 365–394. doi:10.1214/15-AOAS897

Hickman, M. J., Piquero, A. R., & Garner, J. H. (2008). Toward a national estimate of police use of nonlethal force. *Criminology & Public Policy*, *7*, 563–604. doi:10.1111/j.1745-9133.2008.00528.x

Kahn, K. B., Goff, P. A., Lee, J. K., & Motamed, D. (2016). Protecting whiteness: White phenotypic racial stereotypicality reduces police use of force. *Social Psychological and Personality Science*, *7*, 403–411. doi:10.1177/1948550616633505

Kang, J., Bennett, M., Carbado, D., Casey, P., Dasgupta, N., Faigman, D., . . . Mnookin, J. (2012). Implicit bias in the courtroom. *UCLA Law Review*, *59*, 1124–1186. doi:10.1525/sp.2007.54.1.23

Krieger, N., Chen, J. T., Waterman, P. D., Kiang, M. V., & Feldman, J. (2015). Police killings and police deaths are public health data and can be counted. *PLOS Medicine*, *12*, e1001915. doi:10.1371/journal.pmed.1001915

Legewie, J. (2016). Racial profiling and use of force in police stops: How local events trigger periods of increased discrimination. *American Journal of Sociology*, *122*, 379–424. doi:10.1086/687518

Lum, C., & Nagin, D. S. (2017). Reinventing American policing. *Crime and Justice*, *46*, 339–393. doi:10.1086/688462

Lundman, R. J., & Kaufman, R. L. (2003). Driving while black: Effects of race, ethnicity, and gender on citizen self-reports of traffic stops and police actions. *Criminology*, *41*, 195–220. doi:10.1111/j.1745-9125.2003.tb00986.x

Lyons, C. J., & Pettit, B. (2011). Compounded disadvantage: Race, incarceration, and wage growth. *Social Problems*, *58*, 257–280. doi:10.1525/sp.2011.58.2.257

Morabito, M. S. (2007). Horizons of context: Understanding the police decision to arrest people with mental illness. *Psychiatric Services*, *58*, 1582–1587. doi:10.1176/ps.2007.58.12.1582

Muller, C., & Schrage, D. (2014). Mass imprisonment and trust in the law. *The ANNALS of the American Academy of Political and Social Science*, *651*, 139–158.

Piquero, A. R., Farrington, D. P., Nagin, D. S., & Moffitt, T. E. (2010). Trajectories of offending and their relation to life failure in late middle age: Findings from the Cambridge Study in Delinquent Development. *Journal of Research in Crime and Delinquency*, *47*, 151–173.

Plant, E. A., & Peruche, B. M. (2005). The consequences of race for police officers' responses to criminal suspects. *Psychological Science*, *16*, 180–183. doi:10.1111/j.0956-7976.2005.00800.x

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401. doi:10.1177/014662167700100306

Reisig, M. D. (2010). Community and problem-oriented policing. *Crime and Justice*, *39*, 1–53. doi:10.1086/652384

Rengifo, A. F., & Fratello, J. (2015). Perceptions of the police by immigrant youth. *Youth Violence and Juvenile Justice*, *13*, 409–427. doi:10.1177/1541204014547591

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*, e0141854. doi:10.1371/journal.pone.0141854

Sampson, R. J., & Lauritsen, J. L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. *Crime and Justice*, *21*, 311–374.

Sessions, J. (2017). Being soft on sentencing means more violent crime. It's time to get tough again. *Washington Post*. Retrieved from https://www.washingtonpost.com

Sewell, A. A., & Jefferson, K. A. (2016). Collateral damage: The health effects of invasive police encounters in New York City. *Journal of Urban Health*, *93*, 42–67. doi:10.1007/s11524-015-0016-7

Shepherd, J. P., & Sumner, S. A. (2017). Policing and public health—strategies for collaboration. *JAMA*, *317*, 1525. doi:10.1001/jama.2017.1854

Sierra-Arévalo, M. (2016). American policing and the danger imperative. *SSRN Electronic Journal*. doi:10.2139/ssrn.2864104

Silver, J. R., Roche, S. P., Bilach, T. J., & Bontrager Ryon, S. (2017). Traditional police culture, use of force, and procedural justice: Investigating individual, organizational, and contextual factors. *Justice Quarterly*, *34*, 1272–1309. doi:10.1080/07418825.2017.1381756

Spohn, C. (2015). Race, crime, and punishment in the twentieth and twenty-first centuries. *Crime and Justice*, *44*, 49–97. doi:10.1086/681550

Sunshine, J., & Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. *Law & Society Review*, *37*, 513–548. doi:10.1111/1540-5893.3703002

Thoits, P. A. (2010). Stress and health: Major findings and policy implications. *Journal of Health and Social Behavior*, *51*, S41–S53.

Vilagut, G., Forero, C. G., Barbaglia, G., & Alonso, J. (2016). Screening for depression in the general population with the center for epidemiologic studies depression (CES-D): A systematic review with meta-analysis. *PLOS ONE*, *11*, e0155431. doi:10.1371/journal.pone.0155431

Wildeman, C., & Muller, C. (2012). Mass imprisonment and inequality in health and family life. *Annual Review of Law and Social Science*, *8*, 11–30.

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