Police Use of Force by Ethnicity, Sex, and Socioeconomic Class

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ABSTRACT   *Objective:* Disparities in police responses to Black and White people have received significant research and public attention in recent years. This study examines self-reported accounts of exposure to and perceptions of police use of force among Black and White ethnic groups by sex and income level. *Method:* Using bivariate and multivariate approaches, we analyzed data from the Bureau of Justice Statistics 2011 Police–Public Contact Survey, a measure administered to a nationally representative sample of U.S. residents. Participants were asked a series of questions about their most recent contact with police during a 12-month period. Our analyses were limited to Black ($n = 59$; mean age 28.8 years) and White ($n = 366$; mean age 34.6 years) participants whose most recent involuntary contact with police included a street stop. *Results:* For Black residents, being male and having an income under $20,000 significantly increased the risk for exposure to police use of force during a street stop. For White residents, being male, having an income under $20,000, or being age 35 or older significantly increased the risk for exposure to police use of force during a street stop. *Conclusions:* Future research will benefit from additional attention to the cumulative impact of police use of force and how experience with police use of force shapes U.S. residents' understanding of and expectations for procedural justice.

KEYWORDS: police use of force, community policing, ethnicity, socioeconomic class, law enforcement

Disparities in police use of excessive force between Black and White U.S. residents is an area of community policing that has attracted national and global attention. *Police use of excessive force* is defined as the application of force greater than that which a "reasonable" and "prudent" law enforcement officer would use under the circumstances (Bureau of Justice Statistics, 2016). Some examples of excessive use of force by police include (a) physical force against a person who is a free citizen, (b) physical force against a person who is already in police custody and is not resisting being in custody, and (c) physical force against a person

who does not have a weapon or who a police officer should reasonably assume does not have a weapon (LawInfo, 2015). However, police use of excessive force is by no means a new phenomenon in the United States. In the century since the first modern police force was formed in New York City, charges of police use of excessive force have been common and disproportionately used in police contacts involving Black U.S. residents (Hickman, Piquero, & Garner, 2008; Hyland, Langton, & Davis, 2015; Reppetto, 2012).

Scholars suggest that the war on crime and the war on drugs in the U.S. have produced unnecessary violence and antagonism—particularly in predominantly Black disadvantaged urban communities—than effective policing because "these initiatives have put police on the front lines of wars they cannot win" (Skolnick & Fyfe, 1993, p. 114). When police officers engage in the wars against crime and drugs, their enemies are often found in inner cities among ethnic minorities (Skolnick & Fyfe, 1993). Police officers may have trouble distinguishing the "good guys" from the bad, and in such a context, everybody becomes suspect, community and police relations become strained and distrustful, and incidents of police use of excessive force may occur more frequently (Skolnick & Fyfe, 1993). As one officer stated, "If people complained about us every time we kicked somebody's ass, I'd be in big trouble . . . I can't think of a single day when I didn't put my hands on somebody" (Skolnick & Fyfe, 1993, p. 116).

Most police departments in the U.S. have policies that encompass a use-of-force continuum and train officers how to respond with the appropriate level of force to resolve a situation (National Institute of Justice, 2015; Wilt, 2015). The use-of-force continuum typically consists of the following types of force:

- mere presence—police uniforms and distinctly marked cars may have an effect on people's behavior, causing them to comply with the law (e.g., reduce their speed when driving, refrain from jaywalking);
- verbalization—a red light or siren for a person to pull over, or an officer's use of persuasive tone or command voice to achieve the desired results;
- firm grips—to get an individual to remain still or move in a certain direction, but without causing pain (e.g., grips on parts of the body);
- pain compliance—to inflict pain without causing lasting physical injury in order to get a subject to submit (e.g., finger grips, hammerlocks, wristlocks);
- impact techniques—used to overcome resistance that is forcible but less than imminently life-threatening (e.g., kicks, batons, chemical sprays, TASER); and
- lethal force—force capable of killing or likely to kill an individual (e.g., discharge of firearms).

Police use of lethal force has become a national concern due to the highly publicized deaths of 43-year-old Eric Garner on July 17, 2014, in Staten Island, NY; 18-year-

old Michael Brown on August 9, 2014, in Ferguson, MO; 12-year-old Tamir Rice on November 22, 2014, in Cleveland, OH; and others (Wihbey & Kille, 2016). However, police officers' use of less-than-lethal types of force is just as salient. Research has shown that each year, roughly 600,000–700,000 U.S. residents ages 16 and older self-report experiencing police contact that involves use of less-than-lethal force by police (Durose, Smith, & Langan, 2007; Hyland et al., 2015; Langton & Durose, 2013). In addition, approximately 75%–83% of U.S. residents report that police used excessive force (Durose et al., 2007; Hyland et al., 2015). Although exposure to police use of less-than-lethal types of force is experienced across ethnic groups in the U.S., investigators have reported disparities between Black and White residents in their exposure to police use of less-than-lethal types of force and their perceptions of use of force.

Results from prior studies using a nationally representative sample of U.S. residents ages 16 and older show that Black U.S. residents are 3–4 times more likely than White residents to experience police contact involving use of less-than-lethal types of force and 3 times more likely to perceive the force used by police as excessive (Durose et al., 2007; Eith & Durose, 2011; Hickman et al., 2008; Hyland et al., 2015). Similarly, findings from New York City's stop-and-frisk data show that Black residents are 17% more likely to experience police use of hands, 18% more likely to be pushed into walls or to the ground, 16% more likely to be handcuffed, 24% more likely to have a weapon pointed at them, and 25% more likely to be pepper sprayed or hit by a baton than White residents, even after accounting for gender, age, the reason for the stop, and whether the stop took place in a high-crime area or during a high-crime time (Fryer, 2016).

Despite disparities in rates and perceptions of police use of less-than-lethal types of force, Black and White U.S. residents are not homogenous groups, and to our knowledge, no studies have examined how disparities in exposure to specific types of police use of less-than-lethal force vary within Black and White ethnic groups by gender and a socioeconomic status indicator, such as income level. Identifying those who are at risk for exposure to police use of excessive force, including less-than-lethal types of force, may inform preventive and intervention practices and policies aimed at improving community policing and building police trust and legitimacy among vulnerable groups. Therefore, the present study examines how exposure to specific types of police use of less-than-lethal force varies by sex and income status within a nationally representative sample of Black and White U.S. residents. Strategies for improving community policing policies and practices are discussed.

Method

Data were drawn from the Bureau of Justice Statistics 2011 Police–Public Contact Survey, a supplement to the National Crime Victimization Survey, which collects information from a nationally representative sample of U.S. residents regarding their contact with police during a 12-month period. We use the term "Black" or "White"

throughout the article to refer to a social, political, and culturally constructed ethnic group identity and recognize that both groups (Graves, 2001; Sussman, 2014; Zuberi, 2001), like all other ethnic groups in the United States, are heterogeneous. The publicly available data were exempt from review by the institutional review boards of the authors' institutions.

Sample

In 2011, Police–Public Contact Survey interviews were obtained from 49,246 of the 62,280 individuals ages 16 or older in the National Crime Victimization Survey sample. After adjustment for nonresponse, the 2011 sample cases were weighted to produce a national population estimate of 241,404,142 people ages 16 or older. We restricted our analyses to Black and White residents whose most recent involuntary contact with police included a street stop. Other ethnic groups (e.g., Hispanic, Asian, Hawaiian/Pacific Islander) were not included in the present study because the sample sizes were too small for meaningful analysis. The total unweighted sample for Black residents ($n = 59$) by sex consisted of 45 males and 14 females. The total weighted sample for Black residents included in the present study produced a national population estimate of 185,284, including Black males ($n = 142,573$) and Black females ($n = 42,711$). The total unweighted sample for White residents ($n = 366$) by sex consisted of 221 males and 145 females. The total weighted sample for White residents included in the present study produced a national population estimate of 1,141,854, including White males ($n = 735,486$) and White females ($n = 406,368$).

Analysis

We used Chi-square tests with statistical significance at a probability (p) level of < 0.05 to compare the proportion of U.S. residents in each ethnic group by sex and three income levels with exposure to five types of police use of force. Assumptions of the statistical test were satisfied, as the independent variables are categorical based on sex and income. We used the variable of *sex* because this is the term used in the Police–Public Contact Survey. In addition, gender is a more complex construct that couldn't be measured by a binomial variable (e.g., male or female). We used income as an indicator of socioeconomic class (Duncan, Daly, McDonough, & Williams, 2002; Galobardes, Shaw, Lawlor, Lynch, & Smith, 2006). The first income category represents respondents who reported an income of less than $20,000; the second category represents respondents who reported an income of $20,000–$49,000; and the third category represents respondents with a reported income of $50,000 or more. The dependent variables are dichotomous with responses of *yes* or *no* and measure residents' exposure to police use of *shouting, cursing, threaten arrest, push/grab,* and *handcuff*. Perceptions of police actions (e.g., Do you feel police actions were necessary?) and perceptions of force/threat used by police (e.g., Do you

feel force/threats were excessive?) are dichotomous with responses of *yes* or *no*. We conducted logistic regression analyses to determine the unique contribution of sex, income, and a demographic factor (i.e., age) for predicting exposure to each type of police use of force within Black and White ethnic groups.

Results

Table 1 presents descriptive statistics for variables of interest. Within the Black group, males accounted for 77% of recent street stops, compared to 23% for Black females. Most Black residents (73%) reported incomes of less than $20,000—compared to 19% for incomes of $20,000–$49,000 and 8% for $50,000 or more—and the mean age of Black residents was 28.8 years. For White residents, males accounted for 62% of recent street stops, compared to 38% for females. The majority of White residents (38%) reported incomes of less than $20,000—compared to 28% for incomes of $20,000–$49,000 and 34% for $50,000 or more—and the mean age of White residents was 34.6 years.

Chi-square results revealed significant differences in reports of police use of force by sex and income (see Table 2). The likelihood of exposure to police shouting, cursing, and threatening arrest was greatest for Black females and Black residents with incomes of $50,000 or more, whereas police pushing/grabbing and handcuffing was greatest for Black males and Black residents with incomes of less

Table 1

Description of Study Sample (N = 1,327,138; weighted)

	Percentage	Mean
Black (*n* = 185,284)		
Male	77	–
Female	23	–
Age	–	28.8
Income groups		
Less than $20,000	73	–
$20,000–$49,000	19	–
$50,000 or more	8	–
White (*n* = 1,141,854)		
Male	62	–
Female	38	–
Age	–	34.6
Income groups		
Less than $20,000	38	–
$20,000–$49,000	28	–
$50,000 or more	34	–

Table 2

Sex and Income-Level Data Regarding Black and White U.S. Residents' Exposure to Types of Police Use of Force (N = 1,327,138; weighted)

	Shout		Curse		Threaten Arrest		Push/Grab		Handcuff	
	Frequency (%)	χ^2	Frequency (%)	χ^2	Frequency (%)	χ^2	Frequency (%)	χ^2	Frequency (%)	χ^2
Total Black (n = 185,284)										
Males	45,170 (32)	74.0*	17,486 (12)	24.13*	33,294 (23)	17.67*	23,413 (16)	80.2*	21,826 (15)	347.6*
Females	23,315 (55)	—	9,309 (22)	—	14,302 (36)	—	0 (0)	—	4,993 (12)	—
Less than $20,000	46,573 (34)	562.8*	4,884 (4)	558.5*	31,541 (23)	134.3*	23,413 (17)	986.5*	17,029 (13)	755.2*
$20,000–$49,000	12,603 (35)	—	12,603 (35)	—	6,746 (19)	—	0 (0)	—	9,790 (27)	—
$50,000 or more	9,309 (66)	—	9,309 (66)	—	9,309 (66)	—	0 (0)	—	0 (0)	—
Black males (n = 142,573)										
Less than $20k	32,568 (31)	270.8*	4,884 (5)	233.5*	26,548 (25)	546.0*	23,413 (22)	939.9*	12,036 (11)	533.2*
$20k–$49k	12,603 (35)	—	12,603 (35)	—	6,746 (19)	—	0 (0)	—	9,790 (27)	—
Black females (n = 42,711)										
Less than $20,000	14,006 (49)	116.2*	0 (0)	243.2*	4,993 (17)	101.2*	0 (0)	—	4,993 (17)	276.6*
$50,000 or more	9,309 (66)	—	9,309 (66)	—	9,309 (66)	—	0 (0)	—	0 (0)	—

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Total White (n = 1,141,854)										
Males	64,088 (9)	86.9*	34,528 (5)	12.78*	74,979 (10)	1.3	20,202 (3)	27.20*	21,511 (3)	21.39*
Females	58,322 (14)	—	13,383 (3)	—	41,156 (10)	—	5,113 (1)	—	37,818 (9)	—
Less than $20,000	76,624 (18)	564.8*	28,516 (7)	129.1*	30,385 (7)	787.8*	8,141 (2)	216.8*	23,377 (6)	695.6*
$20,000–$49,000	38,744 (12)	—	12,768 (4)	—	44,997 (13)	—	17,174 (5)	—	24,528 (7)	—
$50,000 or more	7,043 (2)	—	6,628 (2)	—	40,752 (11)	—	0 (0)	—	11,424 (3)	—
White males (n = 735,486)										
Less than $20,000	46,366 (20)	628.6*	15,132 (7)	612.9*	0 (0)	456.7*	8,141 (4)	155.7*	0 (0)	105.9*
$20,000–$49,000	17,722 (8)	—	12,768 (6)	—	39,885 (19)	—	12,061 (6)	—	10,087 (5)	—
$50,000 or more	0 (0)	—	6,628 (2)	—	35,094 (12)	—	0 (0)	—	11,424 (4)	—
White females (n = 406,368)										
Less than $20,000	30,258 (16)	495.7*	13,383 (7)	166.0*	30,385 (16)	150.7*	0 (0)	115.1*	23,377 (13)	129.4*
$50,000 or more	21,022 (17)	—	0 (0)	—	5,113 (4)	—	5,113 (4)	—	14,441 (11)	—

Note. $\chi 2$ = Chi-square.

* $p < 0.01$.

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than $20,000 and $20,000–$49,000. The association of sex with exposure to police use of force also varied by income status. Although the likelihood of exposure to police shouting, cursing, and handcuffing was greatest for Black males with incomes of $20,000–$49,000, exposure to police threatening arrest and pushing/grabbing was greatest for Black males with incomes of less than $20,000. The likelihood of exposure to police shouting, cursing, and threatening arrest was greatest for Black females with incomes of $50,000 or more, however, and Black females with incomes of less than $20,000 were more likely to report exposure to police use of handcuffs.

In contrast, the likelihood of exposure to police cursing and handcuffing was greatest for White females and White residents with incomes of less than $20,000 and $20,000–$49,000, whereas police shouting and pushing/grabbing was greatest for White males and White residents with incomes less than $20,000 and $20,000–$49,000. For White residents, the association of sex with exposure to police use of force also varied by income status. Although the likelihood of exposure to police threatening arrest, pushing/grabbing, and handcuffing was greatest for White males with incomes of $20,000–$49,000, White males with incomes of less than $20,000 were more likely to report exposure to police shouting and cursing. Among White females, the likelihood of exposure to police cursing, threatening arrests, and handcuffing was greatest for females with incomes of less than $20,000, but females with incomes of $20,000–$49,000 were more likely to report exposure to police cursing and pushing/grabbing.

Black and White sex and income groups differed significantly in their perceptions of police actions and police threat or use of force. The likelihood of perceiving police actions as unnecessary was greatest among Black males and Black residents with incomes of $20,000–$49,000 and $50,000 or more, whereas perceiving the police force/threat used as excessive was greatest for Black females and Black residents with incomes of $50,000 or more (see Table 3). The association of sex with perceptions of police actions and police threat or use of force also varied by income status among Black residents. Although the likelihood of perceiving police actions as unnecessary was greatest among Black males with incomes of less than $20,000 and $20,000–$49,000, perceiving the police force/threat used as excessive was greatest for black males with incomes of less than $20,000. For Black females, the likelihood of perceiving police actions as unnecessary and perceiving the police force/threat used as excessive was greatest for Black females with incomes of $50,000 or more.

For White residents, the likelihood of perceiving police actions as unnecessary was greatest among males and residents with incomes of $20,000–$49,000, but perceiving the police force/threat used as excessive was greatest for females and residents with incomes of $20,000–$49,000. The association of sex with perceptions of police actions and police threat or use of force also varied by income status. The likelihood of perceiving police actions as unnecessary and perceiving the police

Table 3

Income-Level Data Regarding Black and White U.S. Residents' Perceptions of Police Actions and Use of Force

	Feel Police Actions Not Necessary		Feel Police Force/ Threat Excessive	
	Frequency (%)	χ^2	Frequency (%)	χ^2
Total Black ($n = 96,554$)				
Males	73,239 (100)	31.22*	27,997 (38)	383.8*
Females	14,302 (61)	–	14,302 (61)	–
Less than $20,000	55,840 (86)	485.9*	26,243 (41)	139.3*
$20,000–$49,000	22,392 (100)	–	6,746 (30)	–
$50,000 or more	9,309 (100)	–	9,309 (100)	–
Black males ($n = 73,239$)				
Less than $20,000	50,847 (100)	–	21,251 (42)	896.3*
$20,000–$49,000	22,392 (100)	–	6,746 (30)	–
Black females ($n = 23,315$)				
Less than $20,000	4,993 (36)	976.5*	4,993 (36)	976.5*
$50,000 or more	9,309 (100)	–	9,309 (100)	–
Total White ($n = 252,446$)				
Males	135,666 (86)	111.1*	32,170 (20)	144.6*
Females	65,170 (69)	–	25,619 (27)	–
Less than $20,000	84,398 (75)	469.6*	16,967 (15)	352.6*
$20,000–$49,000	66,040 (88)	–	35,165 (47)	–
$50,000 or more	50,398 (79)	–	5,658 (9)	–
White males ($n = 157,521$)				
Less than $20,000	45,909 (75)	135.1*	8,197 (13)	448.8*
$20,000–$49,000	45,018 (100)	–	23,973 (53)	–
$50,000 or more	44,740 (87)	–	0 (0)	–
White females ($n = 94,925$)				
Less than $20,000	38,490 (74)	417.6*	8,770 (17)	616.7*
$50,000 or more	5,658 (45)	–	5,658 (45)	–

Note. Samples are weighted. χ^2 = Chi-square.
* $p < 0.01$.

force/threat used as excessive was greatest for White males with incomes of $20,000–$49,000. In contrast, the likelihood of perceiving police actions as unnecessary was greatest among White females with incomes of less than $20,000, and perceiving the police force/threat used as excessive was greatest for White females with incomes of $50,000 or more.

We used a binomial logistic regression to ascertain the effects of sex, age, and income on the likelihood that residents experienced exposure to five types of police

use of force (shout, curse, threaten arrest, handcuff, and push/grab) during their most recent police contact during a street stop. Tables 4 and 5 report the odds ratios, which are the natural antilogarithms of the logistic coefficients and represent the multiplicative effect of a predictor on the odds of falling into one rather than the other category on the outcome variables.

Table 4 reveals that being male or having an income of less than $20,000 significantly increased the risk for exposure to police use of force during a street stop for Black residents. Black males were significantly more likely to experience exposure to police shouting, cursing, and threatening arrest than Black females, controlling for age and income. However, Black males were significantly less likely to experience exposure to police handcuffing than Black females, controlling for age and income. In terms of income, Black residents with incomes of less than $20,000 were significantly more likely to experience exposure to police shouting, cursing, threatening arrest, and handcuffing than Black residents with incomes of $20,000–$49,000 and $50,000 or more, controlling for sex and age. Age was not a significant predictor of exposure to police use of force in any of the models for Black residents. In addition, police use of pushing/grabbing was not included as an outcome variable in the logistic regression analysis because males were the only group that reported exposure to this type of police use of force.

Table 5 reveals that being male, being 35 years of age or older, or having an income of less than $20,000 significantly increased the risk for exposure to police use of force during a street stop for White residents. White males were significantly more likely than White females to experience exposure to police shouting, threatening arrest, and handcuffing, controlling for age and income. In terms of age, White residents ages 16–34 were significantly less likely than older White residents to experience any of the types of police use of force included in the models, controlling for sex and income. Additionally, White residents with incomes of less than $20,000 were significantly more likely to experience exposure to police threatening arrest, handcuffing, and pushing/grabbing than White residents with incomes of $20,000–$49,000 and $50,000 or more, controlling for sex and age. However, White residents with incomes of less than $20,000 were significantly less likely to experience exposure to police use of shouting and cursing than White residents with incomes of $20,000–$49,000 and $50,000 or more, controlling for sex and age.

Discussion

The current study revealed that the association of sex with police use of force varied by income status for both Black and White residents. Black males with incomes of less than $20,000 and of $20,000–$49,000 were significantly more likely to report exposure to police use of force during their most recent street stop than Black males with incomes of $50,000 or more. This finding supports prior research suggesting that police use of force among Black residents, particularly Black males, is a

Table 4

Summary of Logistic Regression Analysis for Variables Predicting Police Use of Force for Black U.S. Residents

Predictors	Model 1: Shout		Model 2: Curse		Model 3: Threaten Arrest		Model 4: Handcuff		Model 5: Push/Grab	
	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI
Males[a]	4.1**	[3.9, 4.2]	3.4**	[3.3, 3.6]	1.9**	[1.9, 2.0]	0.78**	[.76, .81]	N/A	N/A
Ages 16–34[b]	0.000	[.000, 1.1]	0.000	[.000, 2.2]	0.000	[.000, 2.6]	0.000	[.000, 6.2]	N/A	N/A
Income less than $20,000[c]	1.6**	[1.5, 1.7]	29.1**	[28.0, 30.1]	1.6**	[1.5, 1.7]	1.7**	[1.7, 1.8]	N/A	N/A

Note. Adj *OR* = adjusted odds ratio; N/A = logistic regression analysis for police use of push/grab was not conducted for Black residents because Black males were the only group that reported this type of exposure.

[a] Reference group = females.

[b] Reference group = individuals ages 35 years and older.

[c] Reference group = individuals who reported income of $20,000 or more.

** $p < .001$.

Table 5

Summary of Logistic Regression Analysis for Variables Predicting Police Use of Force for White U.S. Residents

Predictors	Model 1: Shout		Model 2: Curse		Model 3: Threaten Arrest		Model 4: Handcuff		Model 5: Push/Grab	
	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI	Adj OR	95% CI
Males[a]	1.50**	[1.4, 1.5]	0.57	[.56, .59]	1.10**	[1.0, 1.1]	3.50**	[3.4, 3.6]	0.45**	[.44, .47]
Ages 16–34[b]	0.33**	[.33, .34]	0.26**	[.25, .27]	0.39**	[.39, .40]	0.35**	[.34, .36]	0.83**	[.81, .85]
Income less than $20,000[c]	0.30**	[.29, .30]	0.32**	[.31, .33]	1.60**	[1.6, 1.7]	1.00**	[1.0, 1.1]	1.10**	[1.0, 1.1]

Note. Adj *OR* = adjusted odds ratio.

[a] Reference group = females.

[b] Reference group = individuals ages 35 years and older.

[c] Reference group = individuals who report income of $20,000 or more.

** *p* < .001.

phenomenon primarily expressed in predominantly Black low-income communities (Ross, 2015). However, Black females with incomes of $50,000 or more were significantly more likely to experience a street stop that involved police shouting, cursing, and threatening arrest than Black females from other income groups, suggesting that income may be more of a determinant for exposure to police use of force for this group.

Street stops that result in police use of force among Black residents in this study may be interpreted in the context of the practice of racial profiling and racial threat by police officers (Chambliss & Seidman, 1980; Reppetto, 2012; Rios, 2011; Skolnick & Fyfe, 1993; Warren, Tomaskovic-Devey, Smith, Zingraff, & Mason, 2006). *Racial profiling* refers to the practice of targeting individuals for suspicion of crime based on their racialized group identity (Warren et al., 2006), and *racial threat* refers to the coercive control of racialized minority groups used as a political tool by police to suppress the potential threat they pose to the power and domination of the White elite (Chambliss & Seidman, 1980).

Prior studies have found a link between racial profiling and high rates of street stops among Black residents living in predominantly Black low-income neighborhoods (Gelman, Fagan, & Kiss, 2007; Robert F. Kennedy Human Rights Global Justice Clinic, New York University School of Law, International Human Rights Clinic, University of Virginia School of Law, & Hansford, 2016), as well as racial threat and police use of force (Parker, MacDonald, Jennings, & Alpert, 2005). In contrast, data from a nationally representative sample of Black adults showed that middle-class Black people were significantly more likely than disadvantaged Black people to view the practice of racial profiling as widespread and to report that they have experienced it personally (Weitzer & Tuch, 2002). Similarly, research examining experiences with racialized, biased policing among Black residents living in Georgia and Iowa revealed that perceived discriminatory police actions are greatest for Black people residing in predominantly White affluent neighborhoods and that increases in the Black population intensify discriminatory police actions in these White neighborhoods (Stewart, Baumer, Brunson, & Simons, 2009).

Although some scholars might suggest that higher rates of police contact and police use of force among Black residents result from Black people engaging in disproportionately more crimes than White people, thus requiring more contacts with police, research shows that Black people are significantly more likely than White people to be stopped (Gelman et al., 2007) and 3.5 times more likely than White people to experience police use of force, even after controlling for their rates of offending and contact with the police (Goff, Lloyd, Geller, Raphael, & Glaser, 2016). Furthermore, none of the Black males or females in the current study were arrested as a result of their police contact, suggesting that risks for exposure to streets stops involving police use of force are not limited to Black residents engaged in criminal activity and that the actions and force used by police officers may be unnecessary

and excessive. However, the relationship between sex and police use of force is particularly interesting and warrants future investigations to confirm the assumption that the ways in which Black people are policed vary by socioeconomic characteristics, such as income.

Findings from this study suggest that income may be less of a determinate than sex for White residents, as significant differences in the types of police force used during street stops were found among White males across all income categories and among White females with incomes of less than $20,000 and of $20,000–$49,000. This suggests that for White females, street stops involving police use of force is primarily a phenomenon experienced by low-income residents, whereas it is experienced broadly across income groups for White males. In addition, higher income White males may be at greater risk for experiencing street stops involving police use of more extreme types of force than White females and Black residents, as they were the only group in this study that experienced police force that involved hitting/kicking.

Street stops resulting in police use of force among White residents in this study may also be interpreted in the context of White or White male privileges. Since its founding, the U.S. has been a country primarily controlled by White Anglo-Saxon Protestant males who have been afforded individual, political, structural, social, and economic privileges (Blanchett, 2006). Due to the privileges that White males in America have been granted, White males across income groups in this study may have been more likely to challenge the legitimacy of the street stop and the authority of the police, which in turn may have contributed to police using force as way to exert and maintain their authority. Research has proposed that individuals who challenge the authority of law enforcement are more likely to experience police use of force than those who do not (Reiss, 1971). Yet, the extent to which White residents are afforded White privilege does vary by sex and socioeconomic status indicators (e.g., income), as White males have greater access to resources and power than White females (Kendall, 2002). White females with incomes of less than $20,000 and of $20,000–$49,000 experienced significantly more police use of force than females with incomes of $50,000 or more, possibly because of unprotected White privilege as a result of their income and sex status. In addition, the majority of street stops for White residents did not result in arrest.

Limitations

This study has several limitations. Police–Public Contact Survey data on locations and contextual factors surrounding individuals' interaction with police is not available, and important data on the police officers (e.g., sex, rank, police department of employment, and years on the force) are lacking. Geographic information would enable us to highlight areas where police contact and use of force are most prevalent, and reliance on only civilian accounts of their interaction with police may

have minimized findings due to biases inherent in self-reporting. Including statements from law-enforcement officers and potential witnesses would allow for a more comprehensive analysis of police and resident encounters involving police use of force. Demographic data on police officers would allow for a more comprehensive analysis that tests the association between resident characteristics (i.e., income, sex, and neighborhood residency) and police characteristics (i.e., income, sex, level of training, and years on force) for police and resident contacts involving police use of force. Although the association of sex with use of force varied by income status within each ethnic group, findings should be viewed with some caution due to weighting, as the full range of differences may not have been addressed by this statistical technique. Also, this study used a cross-sectional design, which limited our ability to establish temporal precedence and make causal inferences about police contact involving use of force in relation to Black and White residents. Despite the limitations, the study's national data provided new information about the role of income and sex in street stops involving police use of force for Black and White U.S. residents, carrying implications for policy, future research, and practice.

Implications

Police legitimacy is evaluated by residents and represents their judgements regarding the fairness of the processes through which the police make decisions and exercise authority (Sunshine & Tyler, 2003). Police use of force—when perceived as excessive, unfair, unethical, and biased—can result in residents distrusting law enforcement and perceiving the police as illegitimate (Kane, 2005; Sunshine & Tyler, 2003; Terrill & Mastrofski, 2002; Tyler, 1988). Restoring trust and legitimacy in policing will require identifying those who are at risk for negative law enforcement practices so that more evidence-based approaches could be used in community policing.

This study provides a benchmark of how direct exposure to police contact involving use of force may vary not only between Black and White ethnic groups, but also by sex and income level within those groups. Results from the current study suggest that Black males and White females with incomes of less than $50,000, Black females with incomes of $50,000 or more, and White males with incomes of $20,000–$49,000 and $50,000 or more are significantly more likely to experience a street stop involving police use of force than Black and White residents from other income groups. They are also more likely than Black and White residents from other income groups to perceive the actions of the police to be unnecessary and/or the police force/threat used to be excessive. In addition, findings from the current study suggest that police use of force is experienced as problematic by even socioeconomically advantaged groups. Efforts to restore trust and legitimacy in policing among these populations might be warranted, and some initiatives are under way.

For example, in 2014, former President Barack Obama established the Task Force on 21st Century Policing. The president charged the task force with identifying best practices and offering recommendations on how policing practices can promote effective crime reduction while building public trust (President's Task Force on 21st Century Policing, 2015). The task force identified six key areas of focus: (a) establishing a police culture that is accountable and trustworthy and treats individuals with dignity and respect; (b) creating police-department policies that reflect the values of the communities they serve; (c) building transparency and creating systems for internal accountability and effective data analysis; (d) building relationships with neighborhood residents that will facilitate collaborative efforts aimed at identifying problems and implementing solutions that produce meaningful results; (e) establishing partnerships with academic institutions to develop rigorous training practices, evaluation, and the development of curricula based on evidence-based practices; and (f) developing a task force to study mental health issues unique to officers and recommend tailored treatments. The Task Force on 21st Century Policing is one example of a federal initiative that answered residents' call for community policing that is procedurally just, transparent, and respects the rights of all residents.

Future research should examine the long-term effects of direct and indirect exposure to police use of force on the mental and physical health of U.S. residents and their families, and factors that moderate or mediate this relationship. The relatively small number of studies investigating the relationship between exposure to police use of force and negative mental and health outcomes show an association between police use of force and poor health (i.e., asthma, diabetes, and obesity; Sewell & Jefferson, 2016), stress and worry (Gomez, 2016), trauma and anxiety symptoms (Geller, Fagan, Tyler, & Link, 2014), and manic symptoms (Meade, Steiner, & Klahm, 2015) among U.S. residents. Also, future investigations are needed to confirm the assumption that how Black and White residents are policed varies by ethnicity, sex, and income level. Results from such studies could inform practitioners and policymakers about informal and formal resources that may serve as protective factors and help attenuate the impact of police use of force.

Recommendations such as those by the Task Force on 21st Century Policing may assist in the development, implementation, and sustainability of policies and prevention/intervention strategies focused on improving community policing and police–resident relations. These efforts may help eliminate use of excessive force by police and increase the overall safety and well-being of residents and law enforcement officers.

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Conflicts of Interest

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