DRIVING WHILE BLACK: EFFECTS OF RACE, ETHNICITY, AND GENDER ON CITIZEN SELF-REPORTS OF TRAFFIC STOPS AND POLICE ACTIONS*

RICHARD J. LUNDMAN ROBERT L. KAUFMAN The Ohio State University

Are African-American men, compared with white men, more likely to report being stopped by police for traffic law violations? Are African-American men and Hispanic drivers less likely to report that police had a legitimate reason for the stop and less likely to report that police acted properly? This study answers these questions using citizen selfreports of their traffic stop encounters with the police. Net of other important explanatory variables, the data indicate that police make traffic stops for Driving While Black and male. In addition, African-American and Hispanic drivers are less likely to report that police had a legitimate reason for the stop and are less likely to report that police acted properly. The study also discusses the validity of citizen selfreport data and outlines an agenda for future research.

KEYWORDS: Driving While Black; traffic stops by the police.

Do police make traffic stops for Driving While Black? Are African-American men as compared with white men more likely to self-report being stopped by police for traffic law violations? Are African-American and Hispanic drivers more likely to perceive the stop as pretextual and less likely to report that police had a legitimate reason for stopping them? Do the special problems associated with encounters between police and citizens of color mean that African-American and Hispanic citizens are less likely to exit their traffic stop encounters believing police acted properly?

This paper answers these questions using citizen self-reports of their traffic stop encounters with police. We begin with previous research on the effects of extralegal variables on police actions and research on Driving While Black, including the limits of that research. We then analyze citizen self-reports from a nationally representative sample and control for other important explanatory measures such as social class to clarify and

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extend prior research on traffic stops for Driving While Black and on citizen perceptions of police actions.

EXTRALEGAL VARIABLES AND POLICE ACTIONS PREVIOUS RESEARCH

Previous research has regularly reported that extralegal factors affect police actions after an encounter with a citizen has been initiated. In the late 1940s, for instance, Goldman (1963:21–22) collected data that demonstrated that the police officers he studied paid close attention to the race, nationality, and social class of juvenile offenders when deciding whether to respond formally or informally. Also in the late 1940s, Westley (1953) found that police were quicker to use unnecessary force when suspects did not show respect to officers and as a means of soliciting information.

Since these and similar studies (Black and Reiss, 1970), there has been a steady stream of research focused on how extralegal variables affect police actions during encounters with citizens (for reviews, see Riksheim and Chermak, 1993; Sherman, 1980; also see Engel et al., 2000). This research supports two conclusions. First, extralegal variables play an especially important role in the context of low-visibility police actions such as the decision to write a traffic ticket once a traffic stop has been made (Reiss, 1992; Ross, 1960). Second, no single extralegal variable consistently affects police actions (Engel et al., 2000; Klinger, 1994). Accordingly, results concerning race and ethnicity have been mixed with some finding them important (Goldman, 1963) and others not (Black and Reiss, 1970; Engel, et al., 2000).

However, previous research on the effects of extralegal factors has been limited to what police do once an encounter with a citizen has begun. Scholars, for example, have examined police resolution of traffic stop encounters (Lundman, 1994) but not the decision by police to make a traffic stop in the first place. Much less is therefore known about the possible effects of extralegal factors such as race and ethnicity on police decisions to proactively initiate traffic stop encounters with citizens.

DRIVING WHILE BLACK

PREVIOUS RESEARCH

Research on "Driving While Black" remedies the limits of scholarly study of the effects of extralegal factors by directing sustained attention to whether race and ethnicity affect police decisions to initiate traffic stop encounters (Harris, 2002). This literature also directs attention to how race and ethnicity shape citizen perceptions of the legitimacy of the traffic stop and to citizen perceptions of the propriety of police actions during the traffic stop encounter (Weitzer and Tuch, 2002).

Extant studies of traffic stops for Driving While Black appear to indicate that police stop African-American drivers more often than would be expected on the basis of population baselines (Walker, 2000). For example, San Diego Police Department data (Berjarano, 2001) show that, although African Americans made up only 8% of the city's population aged 15 years and older, 12% of all traffic stops involved African-American drivers, as did 14% of traffic stops for equipment violations. Similarly, Zingraff et al. (2000:8) reported in their preliminary analysis of traffic stops by the North Carolina State Highway Patrol that, although African Americans accounted for 19.6% of North Carolina's licensed drivers, 22.9% of traffic tickets were issued to African Americans (also see Lamberth, 1996; Meehan and Ponder, 2001; Verniero and Zoubeck, 1999).

However, there is more to Driving While Black than disproportionate traffic stops. Scholars have also directed attention to the effects of race and ethnicity on citizen perceptions of "pretextual" traffic stops by police (Harris, 2002) and to the special problems that accompany encounters between police and citizens of color (Sykes and Clark, 1975; also see Weitzer and Tuch, 2002).

"PRETEXTUAL" TRAFFIC STOPS

All drivers routinely violate traffic laws (Harris, 2002; Lamberth, 1996; Meeks, 2000:25–26; Rubinstein, 1973:153), and traffic law violations can therefore serve as a pretext for police motivated by other concerns such as observation of drivers and passengers for signs of drug use or possession (Harris, 2002; Fridell et al., 2001; Weitzer and Tuch, 2002). In 1996 in Whren v. United States (Harris, 2002), the Supreme Court ruled that pretextual stops are legal if the police officer making the stop can articulate a reason grounded in traffic statutes. In the Whren case specifically, the police officers who made the stop and then found crack cocaine explained their action by citing a local statute requiring that drivers devote "full time and attention" (Hall, 1996:2) to their driving.

If police are making pretextual traffic stops, then African-American and other drivers of color ought logically to exit their traffic stop encounters perceiving that police did not have a legitimate reason for making the stop. If police are not using traffic law violations as a pretext for stops, it could be argued that there should not be any difference between citizens of color and whites in their perception of the legitimacy of the stops they experience. However, as we discuss next, other processes influence citizens' perceptions of interactions with police that may either exacerbate reactions to police pretext or create a perception of illegitimacy even in the absence of pretextual actions.

ENCOUNTERS BETWEEN POLICE AND CITIZENS OF COLOR

Police officers enter all of their encounters with citizens expecting that they will be treated with deference (Sykes and Clark, 1975) and that their government-backed authority over citizens will be honored (Bittner, 1970). From the perspective of police, the ability to effectively do their work on a daily basis in ways that routinely fall far short of forceful words and deeds depends on deference toward police by citizens and citizen compliance with police requests and demands.

However, encounters between police and citizens of color pose problems that simply are not present during police encounters with whites that may affect citizens' perceptions regardless of actual police behavior. Because most police officers are white (Maguire and Pastore, 1997:39), African-American and other citizens of color may be reluctant to extend deference and compliance because it risks conflating a white officer's status as a police officer with that officer's position in race and ethnic stratification systems that favor whites (Sykes and Clark, 1975). In addition, police have long brought a far more heavy-handed style of policing to minority communities and treated African-American and other citizens of color in those communities with less respect than citizens in white communities (Anderson, 1999:320-321; Websdale, 2001). Citizens of color are therefore understandably more inclined to withhold their best and to be suspicious of police motives during encounters with police. Last, the pervasive racism characteristic of United States society (Entman and Rojecki, 2000; Feagin, 1991) may cause some citizens of color to view their traffic stop encounters more critically than whites even in the face of police actions that clearly signal equity, decency, and compassion.

Accordingly, African-American and Hispanic citizens should be less likely to exit their traffic stop encounters believing police acted legitimately and properly. Because these problems simply are not present during traffic stops involving white drivers, whites should more likely exit their traffic stop encounters believing police acted legitimately and properly.

LIMITS OF PREVIOUS RESEARCH

Five important limits surround previous research on Driving While Black. First, because the scholarly study of Driving While Black is relatively new (cf., Weitzer and Tuch, 2002), only a handful of studies currently exists. Second, many data collection efforts are ongoing (Meeks, 2000:7;

Ramirez et al., 2000; Zingraff et al., 2000:4) and more complete understanding of Driving While Black must therefore wait until the data currently being collected are complete and available for scholarly analysis. Third, extant research as well as the forthcoming analyses are generally limited to particular police jurisdictions (Lamberth, 1996; Zingraff et al., 2000) and therefore provide locally rather than nationally representative answers to questions about Driving While Black. Fourth, existing analyses and ongoing data collection usually rely on police-reported traffic stops, with police fully aware of the purpose behind the information gathering (Berjarano, 2001). Because police officers know this, some have already been detected falsifying traffic stop information (Donohue, 2000; Meeks, 2000:6-7; Verniero and Zoubeck, 1999:31-32). Last, most extant research on traffic stops and citizen perceptions has not used multivariate techniques to disentangle the effects of race and ethnicity from other possibly important explanatory variables such as social class (an important exception is Weitzer and Tuch, 2002).

THE PRESENT RESEARCH

The present research uses *Contacts between Police and the Public: Findings from the 1999 National Survey* (Langan et al., 2000), which is grounded exclusively in citizen self-reports of their encounters with police. Thus, we employ currently available national rather than local data, and we rely on citizen self-reports rather than police reports to examine how driver race and ethnicity affect traffic stops by police, citizens' perceptions of the legitimacy of the traffic stop, and citizens' perceptions of the propriety of police actions during the traffic stop encounter. All of our analyses are multivariate, controlling for other possibly important predictors.

METHODS

CONTACTS BETWEEN POLICE AND THE PUBLIC DATA AND CASES

Contacts between Police and the Public: Findings from the 1999 National Survey (hereafter "CBPP 1999") is a nationally representative sample, and it was collected as part of the annual National Crime Victimization Survey (Langan et al., 2001). To be included in CBPP 1999, subjects had to be 16 years of age or older and they first answered a long series of questions (31% in person and 69% by telephone) about crime victimization and then a much shorter series of questions lasting 5 to 10 minutes about contacts they had with police in the previous 12 months. Of the 80,543 randomly selected subjects, 7,034 (8.7% of the total sample) reported at least one traffic stop in which they were the driver. Respondents with at least one traffic stop were then asked additional questions, including their perception of the legitimacy of the stop and their perception of whether police acted properly. When subjects reported more than one traffic stop, they were asked to provide information on the "most recent occasion" (Langan et al., 2001:35), thereby providing data for all 7,034 drivers with at least one stop.

DEPENDENT MEASURES

We model three outcomes. The first, Total Traffic Stops,¹ is a continuous variable and is used to examine traffic stops for Driving While Black. The sample for this analysis uses the full sample (N = 80,543). The other two dependent measures direct attention to possible differences between drivers of color and white drivers in their perceptions of police actions associated with the traffic stop. The first, Legitimate Reason for Stop, is dichotomous (yes = 1, no and missing = 0) and proxies drivers' perceptions of pretextual traffic stops by police (Harris, 2002). The second, Police Acted Properly, also is dichotomous (yes = 1, no and missing = 0) and is used to probe the special problems that accompany traffic stop encounters between police and citizens of color (Sykes and Clark, 1975). The sample for analyzing these outcomes is limited to cases with at least one traffic stop (N = 7,034).

MODEL ESTIMATION ISSUES AND DATA ANALYSIS

The first dependent measure (Total Traffic Stops) is a count of the number of traffic stops. As is common for such measures, it has a very disproportionate number of zeros (91.3% of the respondents reported no stops), and the remainder of the distribution is also very skewed. In this situation, ordinary least-squares regression is not the appropriate analytic technique (Long, 1997:217).

We instead use a negative binomial regression model that is specifically intended for analyzing count outcomes. This technique is an extension of the Poisson regression model, which relaxes the Poisson's assumption that the conditional variance of the outcome is equal to the conditional mean of the outcome (Long, 1997:230). In the analyses below, we tested the

^{1.} There are 5,662 cases with one traffic stop and 1,372 cases with more than one stop. For 34 of the cases with more than one traffic stop, we know they were stopped two or more times, but the exact number is not known. In their preliminary analysis, Langan et al. (2001; also personal communication from Matthew Durose, April 11, 2002) replaced these inexact responses with the mode (two stops) of the multistop sub-sample. We prefer using the mean (2.83), but because the negative binomial model requires that the outcome be integer counts, we assigned these cases a value of 3, the integer closest to the mean of those with multiple stops. However, we ran our models without these 34 cases and found exactly parallel results to those we report.

overdispersion parameter for the negative binomial regressions to determine if the negative binomial should be used instead of Poisson regression. As we report for each of the models, the overdispersion parameter estimate is significantly different from zero, indicating that the negative binomial is in fact the better data analytic choice.

The other two outcomes present model estimation issues as well. Because they are categorical, either logistic regression or probit analysis are the techniques of choice (Long, 1997:8–40). In addition, these analyses are subject to a sample selection bias (Heckman, 1979) because these perceptual outcomes are observed only for respondents with at least one traffic stop (N = 7,034). We first created a dichotomous traffic stop dependent measure (at least one stop = 1, no stops = 0) and attempted to use a bivariate probit regression model to correct for the selection bias (Greene, 1997:983). However, the bivariate probit models for both perceptual outcome-dependent measures failed to converge because the estimated error correlations approached the boundary condition of being perfectly correlated.

Our solution was to follow the logic of the sample selection correction methods, which control for a case's likelihood of being selected into the restricted sample (Berk, 1983). In our case, we use logistic regression (Kaufman, 1996) and introduce a control for other police contacts (excluding traffic stops) reported by the respondent. This is a direct measure that controls for how included respondents differ from each other (and from excluded respondents) in their chance of experiencing face-to-face encounters with police and thus of reporting perceptual outcomes.

EXPLANATORY MEASURES

OTHER POLICE CONTACT

Respondents who indicated they had experienced a face-to-face contact with a police officer in the previous 12 months were asked to describe that encounter. Setting aside traffic stops, Other Police Contact represents non-traffic stop encounters with police (at least one other police contact = 1, no other police contact = 0). As noted, Other Police Contact is included as a direct and efficient control for sample selection (Berk, 1983). By measuring the likelihood of face-to-face encounters with police in other settings, it captures respondents' susceptibility to traffic stops in unmeasured ways.

SIZE OF PLACE

Subjects reported where they lived, and CBPP 1999 researchers coupled

this information with census data to place subjects into one of four categories. We used these categories to construct three size of place dummy variables: (1) One Million or more (yes = 1, else = 0); (2) 500,000 to 999,999 (yes = 1, else = 0); and (3) 100,000 to 499,999 (yes = 1, else = 0). Populations of less than 100,000 are the reference category.

We include size of place in our analyses for three reasons. First, most trips that drivers make take place close to where they live (U.S. Bureau of the Census, 2001:631), so most traffic stops take place where respondents live. Second, police officers serving high-population jurisdictions handle more calls from citizens and consequently have less time for traffic stops than police officers serving lower population jurisdictions (Bayley, 1994). Third, police in high-population jurisdictions practice a far more brusque and impersonal style of policing (Barker, 1999:36) that should affect perceptions of police actions.

DRIVER SOCIAL CLASS

Economically advantaged citizens drive more miles each year than less advantaged citizens, putting the former at greater overall risk of being stopped by police (Harris, 2002:244, *n*. 28; U.S. Bureau of the Census, 2001:631). In addition, limited previous research indicates that police reserve formal intervention for citizens who appear to be able to bear the financial costs of formal police actions while simultaneously being more careful during their encounters with advantaged citizens (Campbell and Ross, 1968; Chambliss and Liell, 1966; Kinkade and Leone, 1992; Mastrofski and Ritti, 1992). Last, social class affects citizen perceptions of police and police actions (Weitzer and Tuch, 2002). In sum, this suggests that higher social class drivers may be more likely to be stopped but less likely to perceive the stop as illegitimate or improper.

Respondents self-reported income was placed by CBPP 1999 researchers into one of three broad categories from which we constructed two dummy indicators of social class: (1) Above Average Income (\$50,000 or more = yes, else = 0); and (2) Average Income (\$20,000 to \$49,999 = 1, else = 0). Below Average Income (less than \$20,000 and not answered by subject²) is the reference category.

DRIVER AGE

Young drivers are more likely to engage in "risky driving habits" and thus are more likely to be stopped for traffic law violations (Pfaff-Wright and Tomaskovic-Devey, 2002:13; U.S. Department of Transportation,

^{2.} In the CBPP 1999 data file, respondents who did not answer the income question are not distinguished from those who report income in the lowest category, so they are included in our samples.

2001). We used self-reported age in years to create three dummy variables: (1) Teen (16 to 19 years = 1, else = 0); (2) Young Adult (20 to 29 years = 1, else = 0); and (3) Adult (30 to 64 years = 1, else = 0), making Senior (\geq 65 years) the reference category.

DRIVER GENDER

Women engage in fewer risky driving habits than do men (U.S. Department of Transportation, 2001) and should be less likely to be stopped for traffic law violations. Further, most police officers are male (Maguire and Pastore, 1997:40), and male police officers are more reluctant to stop female drivers for fear of accusations of misconduct (Rubinstein, 1973:265). This suggests that male officers might make stops of female drivers only in the face of clear evidence of traffic stop law violations. In addition, traditional gender role expectations may lead male officers to be more polite in their interaction with female drivers, while female drivers may be more inclined to extend deference to male police officers (Sykes and Clark, 1975:590–591). These potential differences are represented in our models with a dichotomous dummy variable for Female (1 = female, 0 = male).

DRIVER RACE/ETHNICITY

At the core of Driving While Black is the assertion that police target African-American and, to a lesser extent, other drivers of color for traffic stops (Meeks, 2000). Moreover, some scholars argue that police resort to pretext to stop drivers of color (Harris, 2002), while still others have noted the special problems that accompany encounters between police and citizens of color (Sykes and Clark, 1975). If these assertions are true, then citizens of color should report more traffic stops and be more likely to exit their traffic stop encounters with police believing that police did not have a legitimate reason for making the stop and that police did not act properly.

Respondents indicated whether they considered themselves black, Hispanic, a member of some other race or ethnic group, or white. We used these self-designations to create three dummy variables: (1) black (yes = 1, else = 0); (2) Hispanic (yes = 1, else = 0); and (3) Other (American Indian, Aleut, Eskimo, Asian, Pacific Islander, and other = 1, else = 0). Whites form the reference category.

DRIVER RACE/ETHNICITY BY GENDER

Previous research on Driving While Black indicates that police especially target African-American men (Harris, 2002; Meeks, 2000; also see Websdale, 2001:31–32). This suggests that intersections of race/ethnicity and gender may be important. We explore this issue using dummy indicators for seven race/ethnicity by gender groupings: (1) Black Female; (2) Black Male; (3) Hispanic Female; (4) Hispanic Male; (5) Other Female; (6) Other Male; and (7) White Female. We use White Male as the reference category. We then use these variables to estimate two models for each outcome: (1) a "main effects" model including the three dummy indicators of race/ethnicity plus the dummy indicator of gender; (2) an "interaction effects" model in which we replace the "main effect" terms for gender and race/ethnicity with the seven dummy indicators of race/ ethnicity by gender.

RESULTS

TOTAL TRAFFIC STOPS

Table 1 presents the results from the negative binomial regressions for total number of traffic stops. In both models, the effects are consistent and expected. Starting with the predictors other than race and ethnicity, Other Police Contact has a significant positive effect on the number of traffic stops, verifying that this selectivity measure (Berk, 1983) captures how respondents differ in their chances of experiencing traffic stops. The expected number of stops declines across each contrast of larger to smaller population size, which corresponds to the argument that police have less time for traffic stops in higher population jurisdictions (Bayley, 1994). Affluent drivers are stopped more often by police, consistent with both their higher driving mileage (U.S. Bureau of the Census, 2001:631) and with previous research (Campbell and Ross, 1968; Kinkade and Leone, 1992). And, consistent with risky driving habits rooted firmly in age and gender (U.S. Department of Transportation, 2001), young drivers are stopped significantly more often, while female drivers are stopped significantly less often. The latter likewise follows from arguments that male police officers are more reluctant to stop female drivers (Rubinstein, 1973:265).

Model 1 in Table 1 also provides a first look at the effects of driver race/ ethnicity. Black drivers report significantly more traffic stops than do white drivers. In contrast, Hispanic and other drivers report significantly fewer traffic stops by police. Model 2 in Table 1 shows that the race/ ethnicity by gender effects are important as well (Harris, 2002; also see Websdale, 2001:31–32); the change in chi-square between the models is significant (20.88 with 3 df), indicating that the race/ethnicity by gender interactions are needed. Specifically, model 2 shows that African-American men report more stops than do white men. All of the other race/ ethnicity-gender group predictors in model 2, however, are negative and significant, indicating that these groups have fewer stops than white men.

Table 1.Negative Binomial Regression Models of Total
Traffic Stops on Explanatory Measures: CBPP
1999 Data (N = 80,543)

	Total Traffic Stops		
	Model 1	Model 2	
	b	Ь	
Explanatory Measures ^a	(S.E.)	(S.E.)	
Other Experiences with Police			
Other Police Contact	0.761*	0.759*	
	(.028)	(.028)	
Size of Place	, , , , , , , , , , , , , , , , , , ,	~ /	
One Million or More	347*	347*	
	(.051)	(.052)	
500,000 to 999,999	202*	206*	
	(.050)	(.051)	
100,000 to 499,999	142*	143*	
	(.034)	(.035)	
Driver Social Class	(.054)	(.055)	
Above Average Income	.320*	.320*	
Above Average medile			
Augrage Income	(.028) .219*	(.028) .217*	
Average Income			
Driver A re	(.028)	(.028)	
Driver Age Teen	1.001*	1.000*	
leen	1.991*	1.990*	
X7 A.1.1.	(.061)	(.061)	
Young Adult	1.995*	1.996*	
	(.059)	(.059)	
Adult	1.254*	1.255*	
	(.055)	(.055)	
Driver Gender			
Female	632*		
	(.024)		
Driver Race/Ethnicity			
Black	.170*		
	(.035)		
Hispanic	272*		
•	(.039)		
Other	434*		
	(.073)		
Driver Race/Ethnicity by Gender	(, , , , , , , , , , , , , , , , , , ,		
Black Female		547*	
		(.056)	
Black Male		.301*	
		(.045)	
Hispanic Female		-1.038*	
F		(.072)	
Hispanic Male		146*	
		(.047)	
		(.047)	

	Total Traffic Stops		
Explanatory Measures ^a	Model 1 b (S.E.)	Model 2 <i>b</i> (S.E.)	
Other Female		-1.049*	
Other Male		400* (.098)	
White Female		569*	
Constant	-4.107 (.056)	-3.501 (.055)	
Overdispersion parameter	3.658* (.081)	3.648*	
Log-likelihood	-2757è.6	-27566.2	
Chi-square (for fitted model versus model of no effects) df	3204.78** 13	3225.66** 16	
Likelihood Ratio Index	5.49%	5.53%	

Table 1, continued

^a Reference categories are: Size of Place (Less than 100,000), Social Class (Below Average), Age (Senior), Race/Ethnicity (White), Gender (Male), Race/Ethnicity by Gender (White Male).

* p < .05 (one-tailed); ** p < .01.

But these effects show a consistent pattern of differences by both race/ ethnicity and gender. Within race/ethnicity groups, men report a higher number of stops than do women. Within gender, African Americans have the highest number of expected stops, followed by whites, then Hispanics, and then others. Like African-American men relative to white men, African-American women may be targeted in comparison to white women, but the difference is small and not significant.

LEGITIMATE REASON FOR STOP

Some scholars argue that police use pretext (Harris, 2002; Meeks, 2000) to stop African-American and other drivers of color for minor traffic law violations that otherwise would be ignored. The Legitimate Reason for Stop outcome partially probes this argument using drivers' perceptions of the legitimacy of the traffic stop they experienced. Both models in Table 2 support this argument. Model 1 shows that African Americans and Hispanics are significantly less likely to think that police had a legitimate reason for stopping them. At the same time, the difference between others and whites is negative but not significant, and women are more likely than

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men to report that the stop was legitimate (Sykes and Clark, 1975:590-591).

Model 2 shows a slightly more complex pattern when we consider the interaction between race/ethnicity and gender. Within race/ethnicity, there is a consistent effect of gender. Men are less likely to believe that the stop was legitimate than are women. Within gender, the effects of race/ethnicity are slightly different. Among men, African-American men are the least likely to think that the stop was legitimate, followed by Hispanics and then others, with white men the most likely to perceive legitimacy. Among women, the ordering is the same, except for Hispanic women. Hispanic women are the most likely to accept the legitimacy of the stop.

Turning to the other sets of predictors, all but age have significant effects. Drivers with at least one other police contact are significantly less likely to report that police had a legitimate reason for making a traffic stop. This indicates that stopped drivers are not representative of the initial sample (Greene, 1997:983) and demonstrates the importance of controlling for sample selection. Drivers in larger places are less likely than those in smaller places to report a legitimate reason for their traffic stop, suggesting that police in higher population jurisdictions do practice a more brusque and impersonal style of policing (Barker, 1999:36). Finally, drivers with above average and average incomes are significantly more likely to report a legitimate reason for their stop, consistent with the argument that police are more careful in their actions when citizens are affluent (Campbell and Ross, 1968; Chambliss and Liell, 1966; Kinkade and Leone, 1992; Mastrofski and Ritti, 1992).

POLICE ACTED PROPERLY

Previous research (Sykes and Clark, 1975) suggests that special problems are associated with encounters between police and citizens of color. Models 3 and 4 in Table 2 show that is indeed the case. In the additive race/ethnicity and gender effects model, African-American and Hispanic drivers are significantly less likely than Whites to report that the police acted properly, and women are more likely than men to report that police acted properly. As was the case for the pretextual outcome, the interaction between gender and race/ethnicity is more complex. Within gender, African Americans are the least likely to believe that police acted properly and whites are the most likely to think so. Hispanics and others fall in the middle but in opposite orders for men and women. Within race/ ethnicity, the gender effect is the same with women more likely than men to believe that the police acted properly, except for those of other race/ ethnicity for whom the gender difference reverses but is not significant.

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Table 2.Logistic Regression Models of Legitimate Reason
for Stop and Police Acted Properly Dependent
Measures on Explanatory Measures: CBPP 1999
Data (N = 7,034)

	Legitimate Reason for Stop		Police Acted Properly	
	Model 1 b	Model 2 b	Model 3 b	Model 4 b
Explanatory Measures ^a	(S.E.)	(S.E.)	(S.E.)	(S.E.)
Control for Sample Selection				
Other Police Contact	306*	303*	241*	241*
	(.065)	(.065)	(.079)	(.079)
Size of Place				
One Million or More	474*	459*	395*	392*
	(.122)	(.122)	(.144)	(.144)
500,000 to 999,999	279*	282*	044	047
	(.150)	(.150)	(.189)	(.189)
100,000 to 499,999	040	042	115	115
	(.087)	(.087)	(.103)	(.104)
Driver Social Class				
Above Average Income	.247*	.242*	.245*	.246*
	(.075)	(.075)	(.091)	(.092)
Average Income	.165*	.160*	.206*	.209*
	(.074)	(.075)	(.091)	(.091)
Driver Age				
Teen	058	052	342*	342*
	(.165)	(.165)	(.206)	(.206)
Young Adult	.240	.252	097	096
-	(.145)	(.145)	(.184)	(.184)
Adult	.029	.037	051	052
	(.138)	(.138)	(.178)	(.178)
Driver Gender				
Female	.318*		.425*	
	(.061)		(.076)	
Driver Race/Ethnicity				
Black	698*		706*	
	(.090)		(.106)	
Hispanic	261*		352*	
-	(.102)		(.120)	
Other	203		201	
	(.163)		(.198)	

	Legitimate Reason for Stop		Police Acted Properly	
	Model 1 b	Model 2 b	Model 3 b	Model 4 b
Explanatory Measures ^a	(S.E.)	(S.E.)	(S.E.)	(S.E.)
Driver Race/Ethnicity by Gen	der			
Black Female		529*		261*
		(.128)		(.158)
Black Male		579*		736*
		(.120)		(.134)
Hispanic Female		.418*		.312
1		(.194)		(.233)
Hispanic Male		407*		449*
inspanie male		(.120)		(.139)
Other Female		.069		135
other remain		(.269)		(.306)
Other Male		183		016
other male		(.202)		(.254)
White Female		.315*		.397*
white remaie		(.071)		(.090)
Constant	1.506	1.183	2,353	1.936
Constant	(.145)	(.141)	(.186)	(.181)
	(.1+3)	(.141)	(.100)	(.101)
Log-likelihood Chi-square (for fitted model	-3581.8	-3577.5	-2624.93	-2623
versus model of no effects)	165.95**	174.51**	123.05**	126.87**
df	13	16	13	16
Likelihood Ratio Index	2.26%	2.38%	2.29%	2.36%

Table 2, continued

^a Reference categories are: Size of Place (Less than 100,000), Social Class (Below Average), Age (Senior), Race/Ethnicity (White), Gender (Male), Race/Ethnicity by Gender (White Male).

* p < .05 (one-tailed); ** p < .01.

With respect to the other predictors, the effects are as expected. Drivers in the biggest city places, for instance, are significantly less likely to report proper police actions (Barker, 1999:36). Similarly, drivers with above average and average incomes are significantly more likely to report that police acted properly (Mastrofski and Ritti, 1992). And the selectivity control has a significant negative effect, suggesting that non-traffic contact with police is associated with a more negative perception of police actions.

The analyses in Table 2 confirm that there is more to Driving While Black than being targeted for traffic stops by police. African-American and Hispanic drivers are more likely to report that police did not have a legitimate reason to stop them, thereby suggesting more frequent police recourse to pretext when stopping drivers of color (Harris, 2002). AfricanAmerican and Hispanic drivers also are less likely to report that police acted properly, confirming prior research that special problems arise during encounters between police and citizens of color (Sykes and Clark, 1975). The broad pattern that emerges, however, is one in which African Americans and whites have starkly different perceptions of police actions.

DISCUSSION

Our results are clear. Based on citizen self-reports, police are significantly more likely to stop African-American male drivers and there is a similar patterning of stops by race/ethnicity for both men and women. Further, African-American and Hispanic drivers are significantly less likely to report that police had a legitimate reason for making the stop and significantly less likely to report that police acted properly. And, although the reactions of Hispanics and others vary somewhat by gender, beliefs in the legitimacy and propriety of police actions are framed by a polarity between blacks and whites.

The implications of these patterns are troubling, regardless of whether they result from differential treatment of drivers of color by the police, from differential perceptions of and reactions to police by citizens of color, or, perhaps most likely, from both. It is one thing when ordinary white citizens use race and ethnicity to shape their daily activities, resort to pretext as the basis for their actions, and leave unattended the special problems associated with encounters between themselves and citizens of color (Anderson, 1999; Feagin, 1991). It is quite another when citizens report that many police, most of whom also are white (Maguire and Pastore, 1997:39), use race to shape their daily work, resort to pretext, and fail to defuse their encounters with citizens of color. Police are not ordinary citizens but instead are powerful actors who are always situationally correct (Bittner, 1970). In the context of traffic stops, police are actors who are able to stop citizens from driving without their consent, even if the reason for the stop is pretextual. Police are also actors who are able to prevent citizens from resuming their driving unless and until the police officer who made the stop gives permission, even if the officer is not acting properly. Because they are enormously powerful and always situationally correct, police are expected to be commonweal actors (Blau and Scott, 1962:54-57) and, as such, better than ordinary citizens. However, the results of the present research suggest that many police nationally may be ignoring their commonweal obligations by acting just like ordinary citizens or, alternatively, are unable or unwilling to defuse and counter the suspicion with which police actions are viewed by many drivers of color.

ARE CITIZEN SELF-REPORTS OF THEIR ENCOUNTERS WITH POLICE VALID?

The CBPP 1999 consists of nothing more nor less than citizen answers to survey questions. Moreover, because it has a large and nationally representative sample, other scholars almost certainly will turn to it, to subsequent CBPP surveys, and to other citizen self-report data to analyze police and policing (Pfaff-Wright and Tomaskovic-Devey, 2000; Weitzer and Tuch, 2002). In contrast, most existing research on police has been grounded in data collected by trained observers (for reviews, see Riksheim and Chermak, 1993; Sherman, 1980). Accordingly, the major issue surrounding the present research and other analyses using citizen self-report data revolves around a very simple question. Are citizen self-reports of their encounters with police valid? The remainder of this section addresses this issue, starting with the case for validity and continuing with whether validity is in fact a pivotal issue. It also includes an agenda for future research and the need for triangulation.

THE CASE FOR VALIDITY

It is useful to begin discussion of citizen self-reports by noting that there is nothing unusual about scholars using data from citizens in their analyses of crime, criminals, and criminal justice (see Farrington et al., 1996; Grasmick et al., 1993). Uniform Crime Reports data, for example, rest fundamentally on self-reports by citizens because it is their calls that alert police that an index crime has been committed. By their calls, citizens therefore make index crimes visible and make arrests for both index and nonindex crimes possible (Federal Bureau of Investigation, 2000:iv). In victimization surveys, citizens report whether they experienced a criminal victimization, indicate whether they reported that victimization to police, and, for victims of crimes against persons, describe the people who committed the crimes they experienced (Bureau of Justice Statistics, 2001). Similarly, in self-report studies of criminal offenders, subjects describe their own involvement in particular crimes, including traffic law violations and whether they were arrested or ticketed by police (Bachman et al., 2001). When viewed through these lenses, using citizen self-reports of their encounters with police simply extends a long-standing scholarly practice of using data from citizens on crime, criminals, and criminal justice.

In addition, no matter whether data are drawn from *Uniform Crime Reports*, victimization surveys, or self-report studies (Bachman et al., 2001; Bureau of Justice Statistics, 2001; Federal Bureau of Investigation, 2000), the images citizens advance converge on common substance. With respect to crime, for instance, citizens consistently report that most crime is

nonindex crime and that most index crime is property crime, especially larceny theft.

Moreover, the results from our analyses of citizens' self-reports of policing mesh with the manners and customs of police (Black, 1980) that scholars have observed on three important dimensions. First, police are legal actors sensitive to legal factors (Barker, 1999). Because traffic law violations are more common among young drivers and male drivers (U.S. Department of Transportation, 2001), traffic stops should disproportionately involve young drivers and men. Second, past research indicates that police in high-population jurisdictions make fewer traffic stops (Bayley, 1994) and practice a far more brusque and impersonal style of policing that should logically increase the odds of citizen dissatisfaction with police actions (Barker, 1999:36). Third, police have long been more careful with economically privileged citizens (Chambliss and Liell, 1966), making certain they have clearer grounds for intervention and being more careful in their interaction with people who have platform and voice (Mastrofski and Ritti, 1992). Our results precisely parallel the results of past studies of police and policing: (1) young and male drivers report more stops; (2) drivers in higher population areas report fewer stops and are more likely to report dissatisfaction with police; and (3) drivers are more likely to report satisfaction with police if they are economically privileged.

Underreporting by African Americans. The literature teaches that African Americans are more likely to underreport official trouble with the law than are whites (Sudman and Bradburn, 1982), including traffic stops (Clark and Tifft, 1966). Pfaff-Wright and Tomaskovic-Devey's (2000:4) data are typical. Among North Carolina drivers known to have been stopped by police for speeding, three-quarters of whites admitted to being stopped as compared to two-thirds of African Americans.

Such patterns of underreporting may have an important implication for the present research. If these findings do in fact apply to the CBPP 1999 data, then the significantly higher rates of traffic stops self-reported by African-American men are even more robust than they appear. However, there is no certainty that this pattern applies to the data we examined because not all analyses of self-report data reveal differences between whites and African Americans (Farrington et al., 1996).

IS VALIDITY EVEN A PIVOTAL ISSUE?

The present research, however, does not exclusively rise or fall on the validity of citizen self-reports. Instead, it is possible to argue that validity is simply not a pivotal issue and still make a strong case that the results of the present research are profoundly consequential.

More than 70 years ago, sociologists W. I. Thomas and Dorothy Swaine

Thomas (1928:572) taught scholars: " $[i]f \dots [people] \dots$ define situations as real, then they are real in their consequences." More recently, Weitzer and Tuch (2002:436) applied the same argument to citizen reports of traffic stops: "Citizen perceptions of police stops may be considered just as important as the objective reality of such stops. Stops perceived as racially motivated may increase the frequency of confrontations between police and motorists and generate distrust of the police among those who are stopped."

When the CBPP 1999 data used in the present research are examined in light of these important scholarly lessons, validity emerges as a less pivotal issue than otherwise would appear to be the case. Consider first how the respondents of color in our analyses define their traffic stop encounters with police: (1) African-American men are targeted for traffic stops by police; (2) traffic stops of African-American and Hispanic drivers are more likely to be grounded in pretext; and (3) police fail to defuse the special problems associated with their encounters with African-American and Hispanic drivers.

Consider next the consequences of these situational definitions. These definitions link the long history of police control and oppression of African Americans in southern and northern cities (Websdale, 2001) with perceptions of contemporary police control and oppression of African-American and Hispanic drivers on state and local highways and streets (Meeks, 2000). These situational definitions reinforce and reflect African Americans' and Hispanics' deeply held beliefs that police have two styles of policing, one much less legitimate and proper for them and another much more legitimate and proper for whites (Anderson, 1999; Weitzer and Tuch, 2002). These definitions mean African-American and Hispanic adults warn teenage children not just about the dangers of driving while young (U.S. Department of Transportation, 2001), but also about the special dangers of Driving While Black and Brown (Harris, 2002:107-115). And these definitions mean that our cities remain, as the Kerner Commission (1968:x) warned more than 30 years ago, tinder boxes waiting to ignite during the next traffic stop encounter between police and a driver of color (also see Skolnick and Fyfe, 1993:1-22).

FUTURE RESEARCH

Extant research on Driving While Black is extremely limited (for a review, see Harris, 2002), and very few studies have used multivariate analyses (an important exception is Weitzer and Tuch, 2002). With only a limited number of carefully crafted analyses, researchers have no firm sense of the consistent patterns in the mosaic (Becker, 1966:viii) of scholarly understandings of Driving While Black.

The most pressing need, accordingly, is additional research on the factors affecting traffic stops by police. Social science scholars are currently serving as consultants to law enforcement organizations and helping to collect police-reported data on traffic stops (cf., Portland Police Bureau, 2000). Considerable data will therefore become available for analysis in the relatively near future, and scholars have already shown the usefulness of police-reported data (Zingraff et al., 2000).

However, as is the case with citizen-reported data (Pfaff-Wright and Tomoskovic-Devey, 2000), police-reported data raise questions about validity. In particular, it is easy for police to distort the traffic stop data they report, and some officers have already been detected doing precisely that (Donohue, 2000; Meeks, 2000:6–7; Verniero and Zoubeck, 1999:31–32). Moreover, police-reported data do not capture citizen perceptions of the legitimacy of traffic stops nor citizen perceptions of the propriety of police actions. It would therefore be a mistake for scholars to base their understandings of Driving While Black exclusively on the extensive police-reported data that will soon become available.

TRIANGULATED DATA AS THE SOLUTION

The solution is triangulated data (Singleton and Straits, 1999:404–405; Webb et al., 1966:173–174) and to complement police-reported data with two additional types of data. The present research used one of those complementary data sources—citizen self-reports (also see Pfaff-Wright and Tomaskovic-Devey, 2000; Weitzer and Tuch, 2002). The other complementary data source is to train the observers who collected so much of the scholarly data on police and policing in the past (for reviews, see Riksheim and Chermak, 1993; Sherman, 1980) to observe and record the race and ethnicity of the many traffic law violators whom police witness but choose to leave alone and the demeanor of police, not just citizens (Klinger, 1994), during their encounters with drivers whom they do stop.

An agenda for future research is therefore clear. Scholars should continue to collect police-reported data on traffic stops (cf., Zingraff et al., 2000) and to collect and examine citizen reports of traffic stops (Pfaff-Wright and Tomaskovic-Devey, 2000; Weitzer and Tuch, 2002). But they also must expand the training of observers of police to include coding not just traffic stops and the actions and demeanor of police and drivers during stops, but also the race and ethnicity of traffic law violators observed by police but left alone. And, with these triangulated data in hand, researchers can then explore the similarities and isolate and explain the differences that arise from using police-reported, citizen-reported, and observerreported data to describe and explain the phenomenon of Driving While Black.

CONCLUSIONS

The present research supports five conclusions. First, citizens report that police nationally make traffic stops more frequently of African-American male drivers. More broadly, for both women and men, there is an identical pattern of stops by race/ethnicity. Second, African-American drivers (both men and women) as well as Hispanic male drivers are significantly less likely than white men to report that police had a legitimate reason for making the traffic stop, thereby suggesting either police recourse to pretext when stopping drivers of color or varying situational definitions between whites and citizens of color, or both. Third, African-American men and Hispanic men are significantly less likely than white men to report that police acted properly during the traffic stop encounter (as are African-American women compared with white women), thus reinforcing the existence of special problems associated with encounters between police and citizens of color. Fourth, although the reactions of Hispanics and others vary somewhat by gender, beliefs in the legitimacy and propriety of police actions are framed by a stark polarity between African Americans and whites. Most importantly, there is a pressing need and ample scholarly room for additional research on Driving While Black using triangulated police-reported, citizen-reported, and observerreported data.

REFERENCES

Anderson, Elijah

- 1999 Code of the Street: Decency, Violence, and the Moral Life of the Inner City. New York: W.W. Norton & Company.
- Bachman, Jerald G., Lloyd D. Johnston, and Patrick M. O'Malley
- 2001 Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors, 1998. Ann Arbor, Mich.: Institute for Social Research.

Barker, Joan C.

1999 Danger, Duty, and Disillusion: The Worldview of Los Angeles Police Officers. Prospect Heights, Ill.: Waveland Press.

Bayley, David H.

1994 Police for the Future. New York: Oxford University Press.

Becker, Howard S.

1966 Introduction to Clifford S. Shaw, The Jack-Roller: A Delinquent Boy's Own Story. Chicago: University of Chicago Press.

Berjarano, David

2001 Vehicle Stop Study Year End Report: 2000. San Diego: San Diego Police Department.

Berk, Richard A.

1983 An introduction to sample selection models. American Sociological Review 48:386–398.

- Bittner, Egon 1970 The Functions of Police in Modern Society: A Review of Background Factors, Current Practices, and Possible Role Models. Chevy Chase, Md.: National Institute of Mental Health.
- Black, Donald J.
- 1980 The Manners and Customs of Police. New York: Academic Press.
- Black, Donald J. and Albert J. Reiss, Jr.
- 1970 Police control of juveniles. American Sociological Review 35:63-77.
- Blau, Peter M. and W. Richard Scott
 - 1962 Formal Organizations: A Comparative Approach. San Francisco: Chandler Publishing Company.
- **Bureau of Justice Statistics**
 - 2001 Criminal Victimization in the United States, 2000. Washington, D.C.: U.S. Government Printing Office.
- Campbell, Donald and H. L. Ross
 - 1968 The Connecticut crackdown on speeding. Law and Society Review 3:33–53.
- Chambliss, William J. and John T. Liell
 - 1966 The legal process and the community setting. Crime and Delinquency 12:310–317.
- Clark, John P. and Larry Tifft
 - 1966 Polygraph and interview validation of self-reported deviant behavior. American Sociological Review 31:516–523.
- Donohue, Brian
 - 2000 10 troopers cleared of charges as Dunbar sees profiling ending. The Star Ledger. 15 April, A1.
- Engel, Robin Shepard, James J. Sobol, and Robert E. Worden
- 2000 Further exploration of the demeanor hypothesis: The interaction effects of suspect's characteristics and demeanor on police behavior. Justice Quarterly 17:235–258.
- Entman, Robert and Andrew Rojecki
 - 2000 The Black Image in the White Mind: Media and Race in America. Chicago: University of Chicago Press.
- Farrington, David P., Rolf Loeber, Magda Stouthamer-Loeber, Welmoet B. Van Kammen, and Laura Schmidt
 - 1996 Self-reported delinquency and a combined delinquency seriousness scale based on boys, mothers, and teachers: Concurrent and predictive validity for African-Americans and Whites. Criminology 34:493–514.
- Feagin, Joe R.
 - 1991 The continuing significance of race: Antiblack discrimination in public places. American Sociological Review 56:101–116.
- Federal Bureau of Investigation
- 2000 Crime in the United States, 1999: Uniform Crime Reports. Washington, D.C.: U.S. Government Printing Office.

Fridell, Lo 2001	rie, Robert Lunney, Drew Diamond, and Bruce Kubu Racially Biased Policing: A Principled Response. Washington, D.C.: Police Executive Research Forum.
Goldman, 1963	Nathan The Differential Selection of Juvenile Offenders for Court Appearance. New York: National Council on Crime and Delinquency.
Grasmick, 1993	Harold, Charles Tittle, Robert Bursik, and Bruce Arneklev Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. Journal of Research in Crime and Delinquency 30:5–29.
Greene, W 1997	/illiam H. Econometric Analysis. 3d ed. Upper Saddle River, N.J.: Prentice-Hall.
Hall, John 1996	C. Pretext traffic stops: Whren v. United States. Washington, D.C.: Federal Bureau of Investigation.
Harris, Da 2002	vid A. Profiles in Injustice: Why Police Profiling Cannot Work. New York: The New Press.
Heckman, 1979	James J. Sample selection bias as a specification error. Econometrica 47:153-162.
Kaufman, 1996	Robert L. Comparing effects in dichotomous logistic regression: A variety of standardized coefficients. Social Science Quarterly 77:90–109.
Kerner Co 1968	mmission Report of the National Advisory Commission on Civil Disorders. New York: Bantam Books.
Kinkade, l 1992	Patrick T. and Matthew C. Leone The effects of "tough" drunk driving laws on policing: A case study. Crime and Delinquency 38:239–257.
Klinger, D 1994	avid A. Demeanor or crime? An inquiry into why "hostile" citizens are more likely to be arrested. Criminology 32:475–493.
Lamberth, 1996	John In the Courts: Report of John Lamberth, Ph.D. Washington, D.C.: American Civil Liberties Union.
	atrick A., Lawrence A. Greenfield, Steven K. Smith, Matthew R. Durose, <i>i</i> d J. Levin Contacts between Police and the Public: Findings from the 1999 National Survey. Washington, D.C.: Bureau of Justice Statistics.
Long, J. S 1997	cott Regression Models for Categorical and Limited Dependent Variables. Thousand Oaks, Calif.: Sage.
Lundman, 1994	Richard J. Demeanor or crime? The Midwest City police-citizen encounter study. Criminology 32:631-656.

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Maguire, Kathleen and Ann L. Pastore

1997 Sourcebook of Criminal Justice Statistics—1996. Washington, D.C.: U.S. Government Printing Office.

Mastrofski, Stephen D. and R. Richard Ritti

1992 You can lead a horse to water . . .: A case study of a police department's response to stricter drunk driving laws. Justice Quarterly 9:465–491.

Meehan, Albert J. and Michael Ponder

- 2001 Race and place: The ecology of racial profiling African-American motorists. Paper presented at the annual meeting of the American Sociological Association, August.
- Meeks, Kenneth

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2000 Driving While Black. New York: Broadway Books.

- Pfaff-Wright, Cynthia and Donald Tomaskovic-Devey
 - 2000 Self-reported police speeding stops: Results from a North Carolina record check survey. Paper presented at the annual meeting of the American Society of Criminology, San Francisco.
- Portland Police Bureau
 - 2000 Blue Ribbon Panel on Racial Profiling. Portland, Ore.: Portland Police Bureau.

Ramirez, Deborah, Jack McDevitt, and Amy Farrell

2000 A Resource Guide on Racial Profiling Data Collection Systems. Washington, D.C.: U.S. Department of Justice.

- Reiss, Albert J., Jr.
 - 1992 Police organization in the twentieth century. In Michael Tonry and Norval Morris (eds.), Modern Policing. Chicago: University of Chicago Press.

Riksheim, Eric and Steven M. Chermak

- 1993 Causes of police behavior revisited. Journal of Criminal Justice 21:353–382.
- Ross, H. Laurence

1960 Traffic law violations: A folk crime. Social Problems 8:231–241.

Rubinstein, Jonathan

1973 City Police. New York: Farrar, Strauss & Giroux.

- Sherman, Lawrence W.
 - 1980 Causes of police behavior: The current state of quantitative research. Journal of Research in Crime and Delinquency 17:69–100.
- Singleton, Royce and Bruce C. Straits
 - 1999 Approaches to Social Research. 3d ed. New York: Oxford University Press.
- Skolnick, Jerome and James Fyfe
 - 1993 Above the Law: Police and the Use of Excessive Force. New York: The Free Press.

Sudman, Seymour and Norman Bradburn

1982 Response Effects in Surveys: A Review and Synthesis. Chicago: Aldine.

Sykes, Richard E. and John P. Clark

- 1975 A theory of deference exchange in police-civilian encounters. American Journal of Sociology 81:587–600.
- Thomas, William I. and Dorothy Swaine Thomas
 - 1928 The Child in America: Behavior Problems and Programs. New York: A.A. Knopf.
- U.S. Bureau of the Census
 - 2001 Statistical Abstract of the United States. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Transportation
 - 2001 Traffic Safety Facts 1999: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates Systems. Washington, D.C.: U.S. Government Printing Office.

Verniero, Peter and Paul H. Zoubeck

- 1999 Interim Report of the State Police Review Team Regarding Allegations of Racial Profiling. Trenton, N.J.: Attorney General's Office.
- Walker, Samuel
 - 2000 Searching for the Denominator: Problems with Police Traffic Stop Data and an Early Warning System Solution. Washington, D.C.: National Institute of Justice.
- Webb, Eugene, Donald T. Campbell, Richard D. Schwartz, and Lee Sechrest
 1966 Unobtrusive Measures: Nonreactive Research in the Social Sciences. Chicago: Rand McNally.
- Websdale, Neil
 - 2001 Policing the Poor: From Slave Plantation to Public Housing. Boston: Northeastern University Press.
- Weitzer, Ronald and Steven A. Tuch
- 2002 Perceptions of racial profiling: Race, class, and personal experience. Criminology 40:435–456.
- Westley, William A.
- 1953 Violence and the police. American Journal of Sociology 59:34–41.
- Zingraff, Matthew T., H. Marcinda Mason, William R. Smith, Donald Tomaskovic-Devey, Patricia Warren, Harvey L. McMurray, and C. Robert Fenlon
 - 2000 Evaluating North Carolina Highway Patrol Data: Citations, Warnings, and Searches in 1998. Report submitted to North Carolina Department of Crime Control and Public Safety and North Carolina Highway Patrol. November 1.

Richard J. Lundman is Professor of Sociology and a Faculty Affiliate of the Criminal Justice Research Center at The Ohio State University. His teaching and research interests include police and policing, juvenile delinquency, and white collar and organizational deviance. He is currently examining traffic stops for Driving While Black at the start of the 1970s.

Robert L. Kaufman is Professor and Chair of Sociology and a Faculty Associate of the Population Research Initiative at The Ohio State University. His monograph in

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progress on employment segregation and earnings gaps continues a longstanding interest in social stratification, race and sex labor market inequality, and quantitative methodology. Beyond the present collaboration, he is collaborating on studies of wealth inequality among race-ethnic groups and of race-ethnic differences in home equity.