CRIMINOLOGY

POLICING RACE: THE RACIAL STRATIFICATION OF SEARCHES IN POLICE TRAFFIC STOPS*

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Research on race effects in police traffic stops is theoretically underdeveloped. In this study, we derive propositions from Donald Black's theory of law to explain the interaction effects of officer and driver race on searches in traffic stops in St. Louis, Missouri. Our citywide results and those for stops in predominantly White communities are generally consistent with the theory: Searches are more likely in stops of Black drivers than in those of White drivers, especially by White officers, controlling for other characteristics of the officer, driver, and stop. In predominantly Black communities, however, stops of White drivers by White officers are most likely to result in a search. We interpret both sets of results as manifestations of racial profiling in segregated communities and suggest that Black's theory of law remains a promising theoretical framework for future research on the continuing significance of race-based policing in the United States.

Although a burgeoning research literature examines the characteristics and consequences of police traffic stops, most of this research is either

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descriptive, policy focused, or applies advanced econometric models to explain patterns in police stops or searches—and is largely devoid of substantive theory. Good theory organizes observed patterns of behavior into a logically coherent framework that seeks to explain them as a whole and establishes connections among events and actions that otherwise may seem unrelated. Donald Black's (1976, 1980) theory of law is such a framework.

Broad in scope, Black's theory explains the application of legal control across persons, settings, jurisdictions, and functions (enactment, enforcement, adjudication, and punishment). Systematic in formulation, it yields specific, testable predictions about where, when, and to whom the law is applied. In this study, we assess the utility of Black's theory of law to explain race differences in police officers' decisions to conduct a search in traffic stops.[1]

Black's theory challenges the principle of equality under the law. It argues that the decision to invoke the law depends on the relative social position of the parties involved in a given case as well as on the technical merits of the legal violation. Social status, defined by indicators such as differences in wealth, organization, and culture, explains why the law is applied differently across legally similar cases (Black, 2010). Whether a citizen reports a crime, requests an arrest, or votes for conviction as a member of a jury depends on the individual's social position relative to the suspect. Similarly, Black (1980) argued that the decisions of legal agents to invoke the law (e.g., detain, investigate, search, cite, and arrest) can be explained by the agent's social position relative to that of the citizen in a given incident. Black's theory has special relevance to the disparate treatment of racial minorities by legal authorities.

The historical treatment of racial minorities, particularly African American citizens, by police departments is well known (Alex, 1969; Bayley and Mendelson, 1969; Fogelson, 1968; Groves and Rossi, 1970; Hawkins and Thomas, 1991; Wagner and Decker, 1993). The civil disturbances that erupted in cities across the United States in the 1960s were attributed in part to discriminatory practices of the police. National commissions called on police departments to diversify their ranks, arguing that minority officers would have a better understanding of minority communities and display less prejudice than their White counterparts, thereby reducing police–minority conflicts (Decker and Smith, 1980; National Advisory Commission on Civil Disorders, 1968; President's Commission on Law Enforcement and Administration of Justice, 1967). As one report put the issue:

1. Our analysis focuses specifically on the predictions from Black's theory of law related to racial stratification, but for brevity, we refer throughout the article to "Black's theory."

> A department can show convincingly that it does not practice racial discrimination by recruiting minority-group officers, by assigning them fairly to duties of all sorts in all kinds of neighborhoods, and by pursuing promotion policies that are scrupulously fair to such officers. If there is not a substantial percentage of Negro officers among the policemen in Negro neighborhoods, many residents will reach the conclusion that the neighborhood is being policed, not for the purpose of maintaining law and order, but for the purpose of maintaining the ghetto's status quo. They may draw the same conclusion if most or all of the department's Negro officers are assigned to patrol Negro neighborhoods, and are rarely seen in white neighborhoods.... (President's Commission on Law Enforcement and Administration of Justice, 1967: 101–2)

In short, diversifying the ranks of police agencies would eliminate or greatly reduce both the appearance and the reality of racially discriminatory policing in the United States.

In the four decades that followed these recommendations, minority representation in local police departments increased dramatically (Hickman and Reaves, 2006; Sklansky, 2006; Thompson, 2003; Watts, 1981). By 2000, minority officers represented 38 percent of officers in the 62 largest cities in the United States (Reaves and Hickman, 2002). As of 2007, Black officers constituted 11.9 percent of sworn personnel across all local police departments, a figure nearly equal to Black representation in the general adult population (Reaves, 2010).

Despite changes since the 1960s in the composition of police departments, relationships between the police and minority communities remain contentious (Brunson, 2007; Brunson and Miller, 2006; Weitzer, Tuch, and Skogan, 2008). Perhaps the most antagonistic of all police–citizen encounters, short of the use of force, is the decision by the police to conduct a search of a citizen. Searches represent among the most intrusive actions the police can take and might color perceptions of the legitimacy of law enforcement. The racial diversification of police departments, in addition to promoting equal opportunity and justice, is intended to address public concerns regarding racial profiling in law enforcement practices. Black's theory of law suggests, however, that racial disparities in law enforcement are likely to persist regardless of agency diversification, in the absence of fundamental change in the social status of African Americans relative to Whites in the United States.

In this study, we examine how the interaction of officer and citizen race affects the decision to search motorists. Recent research offers evidence that White and minority officers differ in their propensity to arrest and search (Anwar and Fang, 2006; Brown and Frank, 2006; Close and Mason,

2006, 2007), but these efforts have not examined the full range of police–citizen race interaction effects specified by Black (1976) that predict continued disparities for minority citizens. The current study derives predictions from Black's theory of law regarding the likelihood that the police will conduct a search in a traffic stop, depending on the race of the officer and the race of the driver. The accuracy of these predictions is then evaluated with data on nearly 70,000 traffic stops in St. Louis, Missouri.

BLACK'S THEORY OF LAW, RACE, AND POLICE BEHAVIOR

Black (1976) defined law as quantifiable governmental social control. He observed in the context of police behavior that "an arrest is more law than no arrest, and so is a search or an interrogation" (p. 3). Black stated that this variation in police behavior can be explained by the relative social position of the parties involved in a given event, which he conceptualized broadly in terms of differences between the parties in wealth, culture, organization, and normative status, as measured by past applications of law. Although Black included race as part of the cultural dimension of social life (see, also, Cooney, 2009), race is commonly framed in empirical investigations of his theory as an indicator of social stratification, or differences in wealth, power, and prestige between individuals and groups (Avakame, Fyfe, and McCoy, 1999; Black, 1976, 1980, 1989; Copes et al., 2001; Doyle and Luckenbill, 1991; Xie and Lauritsen, 2011).

Black argued that the quantity of law varies with social rank: Persons of higher rank are more likely to use the law (e.g., report a crime, demand an arrest, or bring a lawsuit) than are persons of lower rank. Moreover, the downward application of law (a higher status individual invokes the law against a lower status individual) is more likely than the upward application of law (a lower status individual invokes the law against a higher status individual), with the relationship becoming stronger as the distance in social rank increases.

Although racial minorities vary in social status relative to Whites, Black devotes particular attention to the status of Blacks in relation to the application of the law. Black (1976, 1980) observed that Blacks occupy positions of lower social status than Whites because they generally have less income and wealth, are less powerful, and as members of a historically stigmatized racial minority, rank lower in estimations of social honor or prestige. As a result, Whites are more likely than are Blacks to invoke the law to settle disputes, in general, and in disputes with Blacks, in particular. Black's predictions regarding the downward and upward direction of law yield a rank order

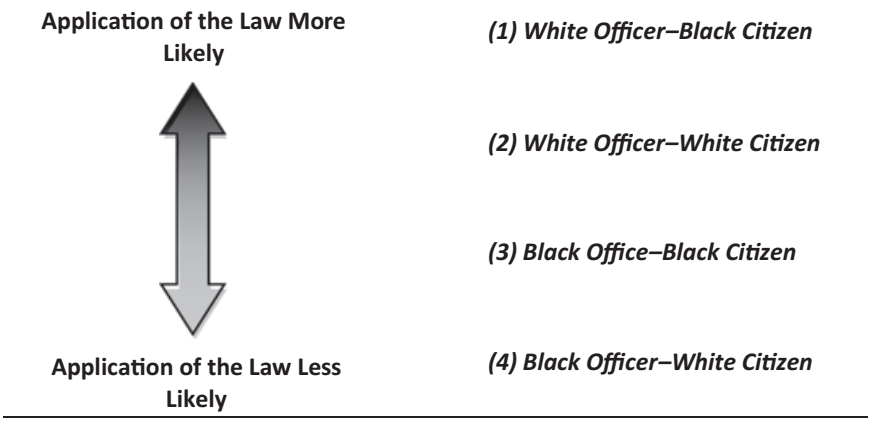
of cases in which law is more or less likely to be applied according to the race of the parties. By drawing on Bowers and Pierce's (1980) research on the death penalty to illustrate his predictions, Black (1989) stated that "an American homicide is most likely to result in capital punishment when a black kills a white, next when a white kills a white, then when a black kills a black, and it is least likely when a white kills a black" (p. 61). Xie and Lauritsen (2011) provided a similar articulation of Black's propositions in their study of the willingness of Black and White citizens to report a crime to the police, with a crime being more likely to be reported when it involves a White victim and a Black offender than when it involves a Black victim and a White offender (see, also, Cooney, 2009).

Black also observed that legal officials are not neutral arbitrators in the application of the law. He found that police officers are influenced by their social position relative to citizens in their decisions to invoke the law and made similar arguments with respect to other legal officials, including prosecutors and judges (Black, 1980, 1989). Black and White police officers, of course, do not differ in professional status, but differences in their general social status should, according to Black's theory, predict race-related patterns in enforcement practices. As such, Black's rank ordering of cases in which law is more or less likely to be applied should explain observed patterns in police decisions to search motorists they have stopped. Figure 1 illustrates these predictions, with the rank order of when officers invoke the law (e.g., conduct a search) from most likely to least likely as follows: 1) White officer–Black citizen, 2) White officer–White citizen, 3) Black officer–Black citizen, and 4) Black officer–White citizen.

The logic for ranks 1 and 4 are straightforward derivations from Black's theory of law. The search or arrest of a Black citizen by a White officer represents a downward application of law; reversing the roles produces an upward application of law. Alternatively, ranks 2 and 3 represent cases in which officers and citizens are of equal racial status, holding other social position influences constant, which requires additional elaboration for ranking one above the other. Black's basic argument about stratification is that persons with high status are more likely to invoke the law than those with low status. This proposition predicts that White officers should be more likely to invoke the law than Black officers. This conceptualization coincides with a similar ordering of status interactions by Xie and Lauritsen (2011).

Black's predictions regarding the race-related application of law are highly pertinent to the presumed impact of the diversification of law enforcement on police behavior. As discussed, national commissions on crime and civil disorder have concluded that hiring more Black officers should reduce racially biased policing because Black officers are presumed to be

Figure 1. Rank-Ordered Likelihood of the Application of Law by Police Officers According to Officer and Citizen Race



less prejudicial toward Black citizens in the application of the law (National Advisory Commission on Civil Disorders, 1968; President's Commission on Law Enforcement and Administration of Justice, 1967). This position is consistent with representative bureaucracy theory, which holds that minority employees in organizations will work to advance the interests of minority clients (Bradbury and Kellough, 2008; Wilkins and Williams, 2008). Translating such claims into the ordered propositions depicted in figure 1, Black police officers should apply less law to Black citizens than do White officers ($3 < 1$). But propositions 2 and 4 in figure 1 predict that both Black and White officers will apply less law to White citizens than to Black citizens, with the least law applied by Black officers to White citizens. These predictions from Black's theory of law are not easily reconciled with those of either representative bureaucracy theory or authoritative statements promoting the diversification of law enforcement personnel to eliminate the racially disparate outcomes of police behavior. Absent broader reductions in racial stratification in the United States, Black's theory of law predicts continued racial disparities in the application of the law by the police despite the diversification of law enforcement personnel. Put differently, Black's predictions depend ultimately on the degree of racial stratification in a society. Where race-related differences in wealth, power, and prestige are more pronounced, the role of race in the application of law by the police should be stronger.

EMPIRICAL EVIDENCE ON RACE IN POLICE–CITIZEN ENCOUNTERS

The history of minorities in policing is consistent with Black's theory of law. Until the 1950s, Black officers were not afforded the same status or power as their White counterparts (Alex, 1969; Dulaney, 1996; Kuykendall and Burns, 1980; Leinen, 1984; Thompson, 2003; Watts, 1981). Reflecting upward status considerations, police departments instituted policies that assigned Black officers exclusively to Black neighborhoods and either outright banned or restricted the ability of these officers to arrest White citizens. In line with the prediction of the downward movement of law, White police officers traditionally have used more law (i.e., coercive sanctions) against Black citizens than White citizens (Alex, 1969; Bayley and Mendelson, 1969; Hawkins and Thomas, 1991). Studies of contemporary police behavior, however, yield inconsistent findings about the role of race in police–citizen encounters. A panel of policing scholars convened by the National Research Council (NRC, 2004) reported that research findings on the differential treatment of citizens based on race are inconclusive, with some studies finding that the police are more likely to detain, arrest, and use force against Black than White citizens and other studies providing null or inverse results. In addition, the panel concluded that no evidence of a relationship was found between officer race and decisions to arrest or use force against a citizen.

Studies conducted since the publication of the NRC report have offered mixed support for the predictions from Black's theory of law shown in figure 1. Kochel, Wilson, and Mastrofski's (2011) meta-analysis of quantitative studies of officer decisions to arrest found that minority citizens are significantly more likely than Whites to be arrested. Similarly, the growing body of research on police traffic stops reveals that Blacks and Hispanics are more likely than Whites to be stopped and searched by the police (e.g., Alpert, MacDonald, and Dunham, 2005; Borooah, 2011; Close and Mason, 2007; Durose, Schmitt, and Langan, 2005; Engel and Calnon, 2004; Engel and Johnson, 2006; Ridgeway, 2006).

In addition, none of the studies reviewed by the NRC panel analyzed the impact on police behavior of officer and citizen race simultaneously. More recent research that explores these interaction effects, however, has produced mixed results. Sun and Payne (2004) found that Black officers are more coercive than White officers in handling interpersonal disputes between citizens, but this difference is unrelated to citizen race. Alternatively, Brown and Frank's (2006) analysis of arrest decisions found that Black officers are significantly more likely to arrest Black citizens than White citizens, whereas White officers are equally likely to arrest citizens of both races. The authors reported that, controlling for officer, citizen, situational,

and community characteristics, Black officer–Black citizen encounters are most likely to produce an arrest, followed by White officer–Black citizen encounters, White officer–White citizen encounters, and Black officer–White citizen encounters. These results, notably the comparatively large probability of arrest in encounters between Black officers and Black citizens, do not support the rank-ordered predictions from Black's theory presented in figure 1.

Interpretation of these results is complicated by multiparty involvement in the observed police–citizen contacts. The rank ordering in figure 1 depicts dyadic interactions between a single officer and a single citizen. Sun and Payne (2004) analyzed incidents involving an officer and two or more disputing individuals. Brown and Frank's (2006) investigation controlled for victim preference for arrest, suggesting that a sizable portion of cases include the victim as a third party. Black (1980) observed that such police–citizen encounters require consideration of more complicated three-way status interactions that account for the relative status of the officer, suspect, and victim. The focus of the current study on searches pursuant to traffic stops obviates these more complicated analyses, however, because traffic stops and searches rarely involve a victim or complainant.

Three studies of traffic stops by the Florida Highway Patrol (FHP) examined the effects of dyadic interactions of officer and citizen race on the decision to conduct a search. The results support the predictions shown in figure 1. Anwar and Fang (2006) found that the probability that a search occurred during a traffic stop follows the pattern presented in figure 1. Their analysis, however, did not include controls for other trooper, situational, or community characteristics. Close and Mason (2006) addressed this limitation using the same FHP data. By controlling for other officer and community characteristics, they found that White troopers are significantly more likely than Black troopers to arrest Black and White drivers for felony and misdemeanor offenses during traffic stops.

Close and Mason (2007) observed the same pattern in nonconsent and consent (low and high discretion, respectively) searches during traffic stops. Rosenfeld, Rojek, and Decker (2012) found similar differences in the search behavior of Black and White officers in a study of traffic stops in a Midwestern city. Although the results of these studies are generally consistent with the predictions in figure 1, they cannot be used to produce a precise rank ordering of searches by police and citizen race because both studies examined the difference in searches between Black and White officers in separate analyses of Black and White drivers.

Close and Mason (2007) also found a positive association between the percentage of Black residents in a county and searches of both Black and White drivers. They conducted additional analyses of the degree to which

county racial composition influences searches of Black and White drivers by Black officers. They found that Black officers were more likely to search both Black and White drivers they stopped in counties with larger Black populations. The latter results, however, are not statistically significant.

Novak and Chamlin (2012) analyzed searches of Black and White motorists in relation to community racial composition in Kansas City, Missouri. They found that search rates are higher in police beats with a larger proportion of Black residents but only for White motorists. Unfortunately, their study does not control for officer race or other characteristics of officers, drivers, and stops.

In sum, the early literature on policing has suggested that past patterns in the application of the law correspond with Black's (1976, 1980) predictions about the role of race in police–citizen encounters. Although these formalized and overt forms of enforcing racial status differences have become less pronounced, more recent research examining police–citizen encounters points to the persistence of racial stratification in framing those encounters. The research results offer some support for Black's predictions regarding the application of law in the context of police decisions to conduct a search in traffic stops, but the studies to date cannot be used to evaluate the full range of those predictions because they have not analyzed the effects on searches of officer and citizen race simultaneously with controls for other influences. The current study fills that research lacuna.

Finally, as noted, the degree of racial stratification should condition the effect of race on the application of law by the police: The greater the distinctions in wealth, power, and prestige between the races, the stronger the effect of both police and citizen race on the application of law by the police. Prior research has evaluated the effect of differences in racial segregation across cities on the mobilization of law by Black and White residents, finding that race effects on the reporting of crimes to the police are stronger in more segregated cities (Xie and Lauritsen, 2011). In the current study, we examine the impact of the racial composition of St. Louis police districts on searches of Black and White motorists by Black and White police officers. St. Louis is a highly segregated city, but for reasons outlined subsequently, we leave open the question of whether race effects on police searches differ in predominantly Black and White communities.

DATA AND METHODS

The data used in this study are from records of traffic stops made by the St. Louis Metropolitan Police Department (SLMPD) in 2007 ($N = 69{,}543$). Despite its name, the SLMPD's patrol and enforcement responsibility is limited to the city of St. Louis. A century ago, St. Louis was one of the nation's largest and most influential cities, but over the past several decades,

the city's size and stature have declined. White flight and, more recently, the loss of Black residents have reduced the city's population from its peak in 1950 of 857,000 residents to its current population of 319,000. Roughly half of the population is Black and half is White; Hispanics and persons of other races make up less than 5 percent of the total population. Substantial racial disparities in economic status characterize the city's current population. For example, the median income of White households is nearly twice that of Black households ($41,843 and $23,067, respectively).[2] St. Louis also remains a racially divided city. The Black population is concentrated primarily in the city's northern and, increasingly, southeastern neighborhoods. The White population resides largely in the central corridor and southwestern part of the city.[3] In short, racial stratification in St. Louis is pronounced, and the marked variation in the racial composition of the city's nine police districts allows for meaningful analysis of the extent to which racial segregation conditions race-related patterns of searches in traffic stops.

The study data consist of attributes of motorists stopped by the police in 2007, characteristics of the stops, and attributes of the officers making the stops. Driver attributes include race, sex, age, and whether the driver was a resident of the city. Characteristics of the stop include time of day, location (city street, interstate highway, or other roadway), and whether the police officer searched the driver or vehicle.[4] Officer attributes include the officer's sex, age, race, education, and duty assignment (district patrol, traffic safety, or special unit). Our analysis is limited to stops of drivers and officers identified as Black (African American) or White.

Like most research on police stops and searches, the data for the current study come from police administrative records. Some researchers have criticized the use of official data to study police behavior, including stops and searches, as unreliable and subject to bias (Lundman, 2004, 2010; Meeks, 2000). It is, therefore, important to note the efforts taken by police and state officials to monitor and improve data accuracy. Since 2000, Section 590.650 of the Missouri Revised Statutes requires that whenever police officers stop a motorist, they must record characteristics of the driver, including his or her race. That information, in turn, is compiled by law

2. The income data are 2005–2007 averages from the American Community Survey (http://www.census.gov/acs/www/).
3. The racial composition and other characteristics of St. Louis neighborhoods can be found on the city's website (http://stlouis-mo.gov/government/departments/public-safety/neighborhood-stabilization-office/neighborhoods/index.cfm).
4. Throughout this article, we use the term "search" to refer to police searches of the driver, vehicle, or both. No information was provided by the SLMPD regarding searches of passengers in vehicles stopped by the police.

enforcement agencies and submitted in an annual report to the state Attorney General. In addition, law enforcement agencies must periodically review the stop data to determine whether individual officers' stop practices are "disproportionate to the population of minority groups residing or traveling within the jurisdiction of the law enforcement agency" (Missouri Revised Statutes, 2011: Title XXI, 590.650, para. 5) and institute policies to halt such practices. Agencies found out of compliance with any provision of the statute may have state funding withheld by the Governor (http://ago.mo.gov/VehicleStops/; accessed April 17, 2012).[5]

The SLMPD employs a two-stage process to safeguard the accuracy of the traffic stop data and, in compliance with the statutory requirement, determine whether individual officers have engaged in racially disparate stop practices. The Crime Analysis unit compares the racial proportions of motorists stopped by officers with the comparable proportions of residents in the district where the stop was made.[6] Instances in which officers have stopped motorists of a particular race far exceeding their presence in the district population are "yellow flagged" for further analysis by the Programming unit. The Programming unit conducts a monthly audit of the "racial profiling" forms officers must complete for each traffic stop they have made, the violation or other circumstance prompting the stop, and subsequent actions taken. The audit reports are circulated to the department command staff.

Although these monitoring and oversight measures afford some confidence in the quality of the data used in this study, it is possible that some officers fail to record the required information on traffic stops, either through negligence or intentional bias. Yet, alternative data sources are not without limitations. Citizen self-reports of traffic stops may fail to capture events omitted by citizens, whether intentionally or unintentionally (Engel and Calnon, 2004; Lundman, 2004). Moreover, empirical research to date using citizen reports has drawn primarily on the Police-Public Contact Survey, an adjunct to the National Crime Victimization Survey, in which young minority males are underrepresented, even though they are disproportionately involved in police stop activity (Eith and Durose, 2011). The use of observational data also is subject to potential bias. Spano (2003, 2006) showed that police officers may alter their behavior in the presence of observers, particularly with regard to controversial activities such as the

5. The authors have worked under contract with the Missouri Attorney General's office since the inception of the statute to monitor the completeness and produce summaries of the data submitted in the annual reports.

6. The description of SLMPD oversight procedures for traffic stops was provided in personal correspondence by the head of the Crime Analysis unit (April 20, 2012).

use of force. It is reasonable to assume that similar bias may occur in studies of racial disparities in police searches.

The current study focuses on variation in searches resulting from traffic stops as a function of the extralegal variable of officer and citizen race. The analysis, therefore, presumes that Black and White officers do not differ with respect to the legally justifiable reasons for conducting a search after stopping a motorist. (This issue will be addressed subsequently.) Department policy requires that officers search drivers they have stopped who are wanted on an outstanding arrest warrant. Accordingly, these cases (approximately 3 percent of all traffic stops) have been omitted from the analysis.

Police officers also exercise discretion with respect to the motorists they stop. The degree to which stop patterns influence resulting race-related search patterns is unknown. We do not have the data necessary to determine racial disparities in stop practices, which at a minimum requires knowledge of the racial composition of the driving population at risk of police stops. This is the well-known "denominator problem" in studies of police stops (Fridell, 2004; Ridgeway and MacDonald, 2009; Walker, 2001). Recent research has sought to overcome this problem by limiting the analysis to poststop outcomes (e.g., Anwar and Fang, 2006; Close and Mason, 2006; Ridgeway and MacDonald, 2009; Rosenfeld, Rojek, and Decker, 2012). We follow this practice in the current study. We do not suspect, however, that strong differences exist in the racial composition of motorists to which Black and White police officers are exposed.

Like most modern police departments in the United States, the SLMPD does not make duty assignments on the basis of officer race. Traffic safety officers are deployed citywide and, therefore, patrol the same roadways and are exposed to a similar race composition of drivers. Officers assigned to specialized units may have elevated exposure to Black motorists because their activity often is directed to high-crime neighborhoods with large Black populations, but Black and White officers should not differ appreciably in such exposure. District patrol officers also are more likely to be exposed to racially distinct driving populations, given the marked differences in the racial composition of the nine police districts in the city (shown in the subsequent discussion). We do observe a small difference in the average percentage of Black residents in districts patrolled by Black and White officers (60.9 percent and 54.8 percent, respectively). It is difficult to determine how a difference of this magnitude, assuming it is reflected in the population of motorists in the nine districts, might affect the search patterns of Black and White officers. In any event, Black and White district patrol officers stop roughly the same percentage of Black drivers (71.7 percent and 69.0 percent, respectively), as do Black and White officers generally, regardless of assignment (60.2 percent and 57.6

percent, respectively). These considerations offer some confidence that the racial stop patterns of Black and White SLMPD officers should not greatly influence the results for searches.[7]

Our primary research objective is to evaluate the predictions from Black's theory of law listed in figure 1. We created four dichotomous variables representing each combination of officer and citizen race shown in the figure. Three of those variables were entered simultaneously in logistic regression models estimating the likelihood of a search, with the Black officer–White citizen dyad omitted as the contrast condition. Other officer characteristics (age, sex, and education) and suspect characteristics (age and sex) also have been used as status indicators in studies of Black's theory and were entered as controls (see Avakame, Fyfe, and McCoy, 1999; Copes et al., 2001; Mastrofski, Reisig, and McCluskey, 2002; Xie and Lauritsen, 2011). We also controlled for the location of the stop (city street, interstate, or state highway), time of the stop (day vs. night), driver's residence (resident of St. Louis vs. nonresident), and officer assignment (district patrol, traffic, or special unit) given prior research showing they are correlated with the likelihood of a search during a traffic stop (Rosenfeld, Rojek, and Decker, 2012). Finally, we compare the reasons recorded by Black and White officers for searching motorists they stopped. All analyses were conducted using Stata version 11.2 (StataCorp, College Station, TX).

RESULTS

Table 1 presents the distribution of all variables included in the multivariate analysis. Most officers who conducted traffic stops were White (57 percent), male (85 percent), more than 30 years of age (75 percent), and did not have a 4-year college degree (75 percent). Most of the drivers stopped were Black (59 percent), male (76 percent), more than 30 years of age (56 percent), and residing outside of the city (57 percent). Most stops were conducted on city streets (87 percent) and during the daytime hours of 6:00 A.M. to 5:59 P.M. (65 percent). Roughly half of the stops were conducted by district patrol officers; another 22 percent were by officers assigned to the Traffic Safety division. The remainder of the stops were by officers assigned to Mobile Reserve, Crime Suppression, Detectives, or other special units (not shown). The modal stop involved a White officer and a Black driver

7. This discussion assumes that officers know the race of the driver when deciding to conduct a stop. Yet analysis of traffic stops conducted during ride-alongs with Miami-Dade police officers revealed that the observer was unable to make a prior determination of the driver's race in 71 percent of the stops (Alpert Group, 2004). By contrast, officers usually know the driver's race when they decide whether to conduct a search.

Table 1. Descriptive Statistics (%) for Traffic Stops of White and Black Drivers by White and Black Police Officers in St. Louis, 2007 ($N = 69,543$)[a]

Variables	Mean	SD
Officer Characteristics		
Black	42.6	49.4
Male	85.0	35.7
Younger than 30	24.6	43.0
College	25.3	43.5
Driver Characteristics		
Black	58.7	49.2
Male	76.0	42.7
Younger than 30	44.1	49.6
City resident	43.0	49.5
Stop Characteristics		
City street	86.5	34.1
Night	35.0	47.7
District	50.5	50.0
Traffic Safety	21.7	41.2
White officer–Black driver	33.0	47.0
White officer–White driver	24.4	42.9
Black officer–Black driver	25.6	43.6
Black officer–White driver	17.0	37.5
Search	5.2	22.2

ABBREVIATION: SD = standard deviation.
[a]Stops of drivers wanted on an outstanding arrest warrant are omitted.

Table 2. Vehicle Stops Resulting in a Search by Officer and Driver Race (%)[a]

	Officer Race		
Driver Race	Black	White	*n*
Black	3.89	8.22	40,807[b]
White	1.54	5.12	28,736[c]

[a]Stops of drivers wanted on an outstanding arrest warrant are omitted.
[b]Pearson $\chi^2(1) = 317.52, p < .01$.
[c]Pearson $\chi^2(1) = 252.16, p < .01$.

(33 percent). Those involving a White officer and a White driver were 24 percent of the total. The remainder involved stops of Black drivers by Black officers (26 percent) and stops of White drivers by Black officers (17 percent). Finally, slightly more than 5 percent of the stops resulted in a search.

Table 2 provides preliminary evidence regarding the probability of a search in St. Louis traffic stops by officer and driver race. The results are consistent with the predictions from Black's theory of law shown in

Table 3. Reasons for Search by Driver and Officer Race (%)[a]

	Black Drivers		White Drivers	
Reasons	**Black Officers**	**White Officers**	**Black Officers**	**White Officers**
Consent	49.1	53.5*	65.4	62.8
Arrest	19.9	21.8	19.2	19.0
Drug odor	14.4	12.6	13.2	9.8
Officer Safety	8.2	10.0	6.0	8.5
Other[b]	11.8	9.3	6.6	6.2
n	693	1,891	182	867

[a]Stops of drivers wanted on an outstanding arrest warrant are omitted. Percentages sum to greater than 100 percent because some officers gave multiple reasons for conducting a search.
[b]Inventory searches and other not specified.
*$p < .05$ (evaluated by chi-square).

figure 1. As expected, stops involving a White officer and Black driver were most likely to result in a search (8.2 percent), and searches were least likely in stops involving a Black officer and White driver (1.5 percent). Between those extremes, searches were somewhat more likely in stops of White drivers by White officers (5.1 percent) than in searches of Black drivers by Black officers (3.9 percent). Although supportive of Black's theory of law, whether these bivariate results withstand the introduction of controls for other characteristics of officers, drivers, and traffic stops must be determined through multivariate analysis. Prior to presenting the regression results, however, we consider the reasons officers recorded for conducting a search.

REASONS FOR A SEARCH

Police officers may conduct a search pursuant to a traffic stop for several reasons. The officer may detect drug or alcohol odors, the driver's demeanor or behavior may cause the officer to fear for his or her safety, or the search is conducted incident to an arrest. Officers also may request the driver's consent to conduct a search. Police officers are not entitled to search individuals based on their race, but legitimate reasons for conducting a search may be correlated with race if, for example, race differences exist in drug possession or other criminal activity leading to arrest. To the degree that Black and White officers differ in their propensity to search motorists for legally justifiable reasons, those differences may affect estimates of race effects on searches.

We do not have measures of all factors, especially driver demeanor and behavior, that influence a police officer's decision to search motorists, but we do have some measures. SLMPD officers are required to record the reason(s) why they search motorists they have stopped. Table 3 presents

these data by race of driver and officer. The results reveal little difference between Black and White SLMPD officers in their recorded justifications for a search. No significant differences by officer race exist in searches motivated by detection of the driver's (or passengers') drug or alcohol use, the officer's concern for his or her safety (an indicator of the driver's emotional state or behavior), or in searches incident to an arrest. We do observe a small but significant difference between Black and White officers in consent searches of Black drivers (49.1 percent versus 53.5 percent, $p < .05$), but no difference in consent searches of White drivers. Yet, race differences in discretionary searches, those not compelled by illegal or threatening behavior, are what our analysis seeks to explain.

Why, then, did we not limit our investigation to consent searches of motorists stopped by the police? Doing so would have eliminated nearly half of the searches from the analysis that are the result of other reasons (e.g., drug odor or officer safety). Moreover, we do not know the number and characteristics of drivers who were not asked for their consent to a search or refused the officer's request. Given the strong similarity between Black and White officers' reasons for conducting a search, retaining the less discretionary searches in the data not only increases statistical power but also should not greatly affect the results of the multivariate analysis of the impact of officer and driver race on searches.

CITYWIDE MULTIVARIATE RESULTS

The results of our citywide multivariate analyses of police searches of motorists are presented in table 4. The unit of analysis is the traffic stop. The outcome is a dichotomous (1,0) indicator of whether the stop resulted in a search. All variables shown in table 4 are dichotomous measures with the variable label equal to one and the contrast set to zero. The independent variables of primary interest are the officer race–driver race combinations, with the Black officer–White driver combination as the omitted contrast. The coefficients are odds ratios (ORs). OR values greater than one represent a positive relationship between the independent variable and the outcome; those less than one represent a negative relationship.[8]

Column 1 in table 4 contains only the officer and driver race combinations. The results are consistent with those presented in table 2. Compared

8. King and Zeng (2001) maintained that logistic regression may produce underestimates of the probabilities of rare events and proposed the use of bias-corrected parameters and standard errors as a remedy. Their simulations suggest, however, that for samples that exceed 20,000 cases and observed event probabilities greater than 1 percent, as in our data for searches, the underestimation bias is small.

Table 4. Effects of Officer Race, Driver Race, and Other Officer, Driver, and Stop Characteristics on Searches[a]

Variables	(1)	(2)	(3)
Officer Race–Driver Race[b]			
White–Black	5.560**	3.172**	1.942**
	(.431)	(.259)	(.203)
White–White	3.342**	2.755**	2.614**
	(.273)	(.228)	(.282)
Black–Black	2.515**	1.993**	1.239*
	(.210)	(.171)	(.137)
Officer Characteristics			
Male	—	1.860**	1.509**
	—	(.109)	(.121)
Younger than 30	—	.779**	.735**
	—	(.032)	(.038)
College	—	1.230**	1.558**
	—	(.046)	(.078)
District[c]	—	.456**	—
	—	(.018)	—
Traffic Safety[c]	—	.163**	—
	—	(.014)	—
Driver Characteristics			
Male	—	2.386**	2.594**
	—	(.132)	(.184)
Younger than 30	—	1.984**	1.528**
	—	(.075)	(.076)
City resident	—	1.704**	1.313**
	—	(.066)	(.065)
Stop Characteristics			
City street	—	1.788**	1.259
	—	(.154)	(.185)
Night	—	1.735**	1.056
	—	(.064)	(.051)
Log likelihood	−13,833	−12,632	−7,040
Pseudo-R^2	.030	.114	.047
n	69,543	69,543	35,102

[a]Logistic regression equations (search = 1, no search = 0). Coefficients expressed as odds ratios. Standard errors in parentheses. Stops of drivers wanted on an outstanding arrest warrant are omitted.
[b]Contrast is Black officer–White driver.
[c]Contrast is special unit officer.
*$p < .05$; ** $p < .01$.

with the omitted category of stops involving Black officers and White drivers, the odds of a search are more than five times greater for stops involving White officers and Black drivers, more than three times greater for stops involving White officers and White drivers, and more than twice as great for those involving Black officers and Black drivers. These results persist, although the effect sizes are diminished somewhat, with the controls added to the equation in column 2 of the table.

All control variables have a significant effect on the likelihood that a traffic stop resulted in a search. The odds of a search are greater for stops by male than by female officers, by officers more than 30 years of age, and by those with a college education. District patrol and traffic safety officers were less likely to conduct searches than those assigned to special units. Searches were more likely in stops of male drivers, younger drivers, and city residents. Last, officers were more likely to conduct a search in traffic stops occurring on city streets and at night than in those on state or interstate highways or during the daytime. Despite the significant effects of these officer, driver, and stop characteristics on the likelihood of a search, however, the effects of officer and citizen race remain significant, sizable, and conform to the rank-ordered predictions derived from Black's theory of law shown in figure 1.[9]

AREA RACIAL COMPOSITION AND RACE EFFECTS ON POLICE SEARCHES

The results presented thus far apply to all traffic stops of White and Black motorists by Black and White police officers, regardless of the racial composition of the area in which the stop occurred. How should a community's racial composition influence the role of race in police searches of motorists? Prior research does not offer firm guidance on this question. The review of policing research by the National Research Council (2004) found weak effects of community disadvantage and racial composition on police practices.

One reason for the weak or mixed results of prior research may be that the separate dimensions of racial stratification are far from perfectly correlated, especially across communities within the same city. For example, in St. Louis, predominantly Black communities are considerably poorer than racially mixed or predominantly White communities (see footnote 2). But on the power dimension, predominantly Black communities may be better off than those in which Black voters are in the minority, especially in jurisdictions like St. Louis with district-based city councils in which "block voting" is prevalent. Such areas are more likely to elect officials and press for policies to advance their interests, including effective and fair policing (National Research Council, 2004: 200–2; Stucky, 2005).

The ecological perspective on policing yields a similar hypothesis regarding community effects on police behavior. The police fashion their role

9. The effects of officer and driver race on searches shown in column 2 of table 4 are not an artifact of using the Black officer–White driver category as the omitted contrast. Regardless of the category selected as the contrast, the results remain significant and the rank order of officer–driver race effects remains the same. All results not shown are available from the authors.

identity and work strategies, in part, in relation to the norms and expectations of the communities they patrol, which may vary from community to community (Klinger, 1997; Rubinstein, 1973). Thus, if there is an ecological influence of community racial composition on the search patterns of officers of different races, it is more likely to be reflected in the stops made by district patrol officers than by traffic safety officers or those who pursue citywide investigations.

Our analysis of the influence of community racial composition on searches is limited to traffic stops made by district patrol officers. The SLMPD provided data on the racial composition of the nine police districts to which patrol officers are assigned. No information was available regarding the community characteristics of the stops by traffic safety or special unit officers. District patrol officers represent the large majority of field-deployed personnel and conducted slightly more than half of all traffic stops in 2007 (see table 1). These officers have the general responsibilities of responding to calls for service and, less frequently, engaging in proactive crime control efforts. As such, their stop activity is generally guided by their own discretion and community norms as opposed to predefined targeted enforcement efforts, such as traffic control or special investigations.

Given the limited and mixed results of prior research regarding the impact of community racial composition on police behavior, including the decision to conduct a search, our analysis is necessarily exploratory. We begin by examining the impact of officer and driver race on searches conducted by district officers alone (see column 3 of table 4). The analysis reveals a reordering of the officer–driver race combinations for all stops presented in column 2 of the table. For stops by district patrol officers, the likelihood of a search is greatest in stops of White drivers by White officers (OR = 2.614, $p < .01$), followed by stops of Black drivers by White officers (OR = 1.942, $p < .01$), and stops of Black drivers by Black officers (OR = 1.239, $p < .05$). These findings provide mixed support for Donald Black's predictions shown in figure 1. The general proposition that individuals of higher social status are more likely to invoke the law than those of lower status is supported. White district officers were more likely than Black district officers to search both Black and White drivers. The prediction that encounters involving upward status differences (e.g., Black officers–White drivers) are less likely to result in the application of law than encounters between status equals (e.g., Black officers–Black drivers) also holds, but only for Black officers. White district officers were more likely to search White drivers than Black drivers.[10] This result contradicts Black's prediction regarding the downward application of law by status superiors.

10. When the White officer–Black driver combination is set as the contrast, the White officer–White driver combination is statistically significant (OR = 1.346, $p < .01$).

The results for the additional control variables are largely similar to those in the analysis of all officers. Searches are more likely in stops involving male officers, older officers, and those with a college education. In addition, stops involving male drivers, younger drivers, and city residents are more likely to result in a search. In contrast with the results for all officers, however, the district officers were no more likely to search drivers stopped on city streets than on other roadways or drivers stopped at night than during the day.

We now turn to the results of primary interest, the degree to which the race-related search patterns of district officers are conditioned by the racial composition of the areas they patrol. Prior research on this issue is very limited. As noted, Close and Mason (2007) found that community racial composition influenced search patterns by Florida Highway Patrol officers, but the relevance of their results to the current study is uncertain. They used county-level data to assess the impact of community racial composition on law enforcement activity. To the degree that racial composition has any effect on police behavior, the effect is arguably stronger or may differ for smaller and more homogeneous geographic areas, such as police districts in a single city. Second, FHP officers are primarily responsible for enforcement of the state traffic code and provision of public safety on state highways and interstates (Florida Statute 321.02). As a result, much of their stop activity takes place on interstates and rural state highways, and the motorists they stop may live some distance from the area in which the stop occurs. In this respect, the enforcement activity of FHP officers is more similar to that of SLMPD traffic safety officers than to the general crime control and public order functions of district patrol officers.

Because individual traffic stops are nested in communities, a multilevel or nested model ideally should be used to estimate community effects on individual outcomes. The nine police districts represent the lowest level of aggregation in the SLMPD traffic stop data, however, which yields insufficient statistical power to estimate "second-level" effects reliably (see Bickel, 2007; Maas and Hox, 2005).[11] As an alternative, we examined the influence of area racial composition on police searches by separating the nine patrol districts into three groups, each composed of three districts, based on the similarity of district racial composition, and then a separate logistic regression was estimated for each group.[12] The three district groups

11. As a reviewer has pointed out, neighborhoods or census tracts are more demographically homogeneous as well as more numerous geographic areas than the nine police districts in St. Louis, which averaged roughly 35,000 residents in 2007.

12. We were able to obtain data on the violent crime rates of the nine police districts. District violent crime and the percentage of Black residents are nearly collinear

represent areas with a "low," "middle," and "high" percentage of Black residents (means = 25.7 percent, 71.9 percent, and 95.9 percent, respectively). The number of traffic stops also varied across the three areas, with the largest number of stops occurring in the area with the lowest percentage of Black residents (16,001, 9,697, and 9,404, respectively). The regression results were obtained from the model for all district officers shown in column 3 of table 4, estimated separately for each group of three districts. The results are presented in table 5.

Table 5 reveals that the pattern of searches in traffic stops by officer and citizen race differs considerably depending on the racial composition of the area where the stop occurred. The results for the area with the lowest percentage of Black residents (and the largest number of stops) generally conform to Black's rank-ordered predictions regarding the application of law according to officer and citizen race. Stops involving White officers and Black drivers were most likely to result in a search, followed in descending order by stops of White drivers by White officers, stops of Black drivers by Black officers, and stops of White drivers by Black officers (the contrast condition). All coefficients shown are statistically significant at the .01 level. The one divergent result is that the small difference in searches of Black and White drivers by White officers is not significant.[13]

The results for areas with relatively large Black populations, however, are far less consonant with Black's theory. In these areas, the greatest likelihood of a search was in stops of White drivers by White officers. White drivers were especially vulnerable to searches by White officers in the area of the city with the "middle" percentage of Black residents. The racial composition of this area is roughly the obverse of that of the area with the lowest percentage of Black residents. Here, White officers were more than six times as likely to search White drivers as were Black officers and were more than twice as likely to search White drivers than Black drivers.

In the area of the city with the largest percentage of Black residents, the pattern of results is even more at odds with Black's predictions. Here again, the greatest likelihood of a search is observed for White drivers stopped by White officers, although the magnitude of the difference with the contrast condition (OR = 1.790, $p < .01$) is smaller than that for the area in which the Black and White populations are somewhat more evenly balanced. But, in contrast with the results for the other areas and with the predictions from Black's theory of law, searches were less likely in stops of Black drivers by

($r = .893$). No substantive differences in results were found when the violent crime rate was substituted for racial composition in the analyses reported.

13. When the White officer–White driver combination is set as the contrast, the White officer–Black driver combination is not significant (OR = 1.076, $p = .396$).

Table 5. Effects of Officer Race, Driver Race, and Other Officer, Driver, and Stop Characteristics on Searches in Police Districts with Low, Middle, and High Percentage of Black Residents[a]

	Percent Black Residents		
Variables	**Low**	**Middle**	**High**
Officer Race–Driver Race[b]			
White–Black	2.957**	2.992**	.765
	(.440)	(.907)	(.145)
White–White	2.748**	6.591**	1.786**
	(.419)	(2.038)	(.356)
Black–Black	1.530**	2.035*	.461**
	(.254)	(.634)	(.084)
Officer Characteristics			
Male	1.374**	2.943**	.873
	(.156)	(.574)	(.140)
Younger than 30	.625**	1.033	.555**
	(.051)	(.103)	(.052)
College	1.810**	1.120	1.607**
	(.138)	(.111)	(.156)
Driver Characteristics			
Male	2.873**	2.478**	2.290**
	(.318)	(.338)	(.290)
Younger than 30	1.640**	1.325**	1.521**
	(.126)	(.125)	(.138)
City resident	1.231**	1.628**	1.432**
	(.097)	(.161)	(.133)
Stop Characteristics			
City street	.990	2.654**	.812
	(.214)	(.798)	(.227)
Night	1.046	1.222*	.884
	(.076)	(.114)	(.080)
Log likelihood	–3,063	–1,870	–2,005
Pseudo-R^2	.058	.063	.060
n	16,001	9,697	9,404

[a]Logistic regression equations (search = 1, no search = 0). Coefficients expressed as odds ratios. Standard errors in parentheses. Stops of drivers wanted on an outstanding arrest warrant are omitted.
[b]Contrast is Black officer–White driver. "Low" = three districts with lowest percentage Black residents (mean = 25.7 percent); "middle" = three districts with middle percentage Black residents (mean = 71.9 percent); and "high" = three districts with highest percentage Black residents (mean = 95.9 percent).
*$p < .05$; ** $p < .01$.

White officers, although this result does not differ significantly from that for stops of White drivers by Black officers (OR = .765, $p = .158$).

The results for the control variables also differ somewhat across the three areas. Whereas young male city residents have a comparatively high risk of being searched when stopped by the police in all three areas, the results for characteristics of officers and stops are less consistent. Younger officers are

less likely, and college educated officers are more likely, than other officers to search motorists in the areas with the lowest and highest percentage of Black residents but not in the more racially balanced area. By contrast, in this area, stops at night and on city streets are more likely to result in a search than those during the daytime or on other roadways, but that is not the case in the other areas.

The theoretically pertinent results presented in table 5 suggest that White drivers run a greater risk of being searched when stopped by the police, especially White officers, in areas where Whites are in the minority than in those where they are the majority population. Black drivers are least likely to be searched when stopped by the police in areas where Blacks constitute the overwhelming majority of residents. These results are generally consistent with arguments concerning the impact of minority political power on policing in "majority–minority" communities and with the ecological perspective on police behavior and community norms. But one result fits uneasily with these explanations: the elevated likelihood that White drivers were searched by *White* officers, particularly in more racially mixed areas of the city.

One explanation for this result is that, for some reason, White officers are more likely than Black officers to encounter White criminal offenders in racially mixed areas and, consequently, to make more arrests. Because a search is mandated when an arrest is made, this could explain the higher search rates of White drivers by White officers. We investigated this possibility by removing from the analysis stops resulting in the driver's arrest. (Recall that stops of drivers wanted on an outstanding arrest warrant also are excluded.) We found no substantive differences in the results with these cases omitted. If anything, the likelihood of a search in stops of White drivers by White officers in the "middle" group of districts is even greater when the analysis is limited to traffic stops that did not result in the driver's arrest (OR = 8.860, $p < .01$).[14] The heightened vulnerability of White drivers to searches by White officers in racially mixed or predominantly Black communities is not, therefore, a function of their greater criminality, at least as measured by arrests.

DISCUSSION

The current study advances research on police traffic stops by applying a comprehensive theoretical framework, Donald Black's theory of law, to police searches of motorists. We find considerable support for predictions derived from the theory regarding the role of race in police searches.

14. As in previous analyses, stops of White drivers by Black officers are the omitted contrast in this equation.

Our study also suggests, however, that much work remains to be done with respect to how the racial composition of a community conditions the interaction effects of officer and driver race on police searches in traffic stops.

We evaluated rank-ordered predictions from the theory regarding the likelihood of a search in traffic stops, depending on the race of the driver and officer, with data on nearly 70,000 police traffic stops in St. Louis, Missouri. Our citywide analyses largely confirm Black's predictions. The results hold even in the face of relevant controls for other characteristics of officers, drivers, and stops. They suggest that, despite the diversification in law enforcement agencies in recent decades—including the agency under consideration in this study—Black citizens continue to receive disparate treatment from the police.

We found generally similar results for areas of the city in which Blacks are in the minority. But in areas where Blacks are the majority population, a different set of results emerged. Although, as expected, White officers were more likely than Black officers to search drivers they stopped in these areas, they were far more likely to search White drivers than Black drivers, especially in mixed-race areas. The latter result upsets the ordered predictions from Black's theory of law and suggests that the racial composition of a community has a strong, if not easily interpreted, influence on police search patterns.

Our citywide results are generally similar to those of prior research on police searches of motorists (Anwar and Fang, 2006; Close and Mason, 2006, 2007). Our results regarding the impact of community racial composition on searches, however, differ from those of Close and Mason (2007), who found increased search rates of both Black and White drivers in areas with larger proportions of Black residents. The differences in results between their study and ours may be attributable to the use of different units of analysis (counties vs. police districts in a single city) or to the differing duty assignments of officers in the two studies (traffic vs. district patrol). As in the current study, Novak and Chamlin (2012) found elevated search rates of White drivers stopped by the police in predominantly Black communities of a large city, but they did not control for the race of the officer making the stop.

Black's theory is predicated on the continuing significance of racial stratification for police–citizen encounters. Where race differences in wealth, power, and prestige are large, the dominant racial group should receive favored treatment from the police. How, then, might we explain what seems to be distinctly unfavorable treatment of White citizens by White police officers in predominantly Black neighborhoods? We have suggested that Black citizens may have comparative advantages in their dealings with the police in communities where they are the political majority and can

influence police behavior, either formally by promoting nondiscriminatory enforcement policies or informally through community norms that shape police practices. These considerations help to explain the divergent search patterns observed in predominantly Black communities in St. Louis, but only in part. They do not explain readily why White police officers are especially hard on White drivers in these communities. Something else must be involved.

One possible explanation is that White officers in minority communities engage in what can be called "out-of-place" policing. Analysts of racial profiling have called attention to this practice in studies of the disparate treatment of Blacks by the police in predominantly White neighborhoods (Meehan and Ponder, 2002). But racial profiling can cut both ways and result in the heightened application of law to Whites found in places where the police believe they do not belong. The presence of White drivers in predominantly Black communities may attract suspicion because they violate police officers' expectations concerning conventional or normal events or persons, leading some officers to conclude that such persons "must be up to no good" (Skolnick, 1966: 48; also see Novak and Chamlin, 2012).

It is doubtful that such reverse profiling reflects the norms or politics of minority communities. If it did, then we would expect Black police officers who patrol these communities to engage in the practice as well. Instead, whether directed at Black or White citizens, out-of-place policing stems from the same structures of racial stratification and the accompanying attitudes and beliefs among members of the dominant racial group that culminate in the enduring patterns of racial segregation to which the police respond—and race-based policing helps to maintain (Capers, 2008). In a racially stratified society and racially segregated city, Blacks *and* Whites encountered in the "wrong" places evidently provoke police suspicion.

If these results are replicated in future research, then they have important implications for law enforcement policy and training. Modern police forces are trained to look for out-of-the-ordinary occurrences and people as cues to possible wrongdoing (e.g., a broken shop window or door ajar after business hours). They also are counseled that an individual's race is not to be used as the sole or primary criterion of criminal suspicion. Yet, entrenched and taken-for-granted patterns of racial segregation evidently produce suspicion when the police encounter individuals whose race does not match their surroundings. A useful contribution to the literature on police policy and practice from racial profiling research is evidence that such "hunches" may need closer scrutiny. Academy and in-service training should seek to eliminate stereotypical views of "symbolic assailants" based on perceptions of a racial mismatch between individuals and communities. Officers who engage in out-of-place policing should be called to account and, if they persist, sanctioned. Given the stubborn endurance of racial

segregation, it will not be easy to overcome out-of-place policing, which only increases the importance of critical scrutiny of the application of law in ways that reinforce racial inequities.

Like the bulk of research on police traffic stops, our study is limited to a single jurisdiction at a single point in time and does not include the interview or observational data needed to establish the attitudes and motivations underlying racially disparate law enforcement practices. Nor do we have information, beyond a limited number of items from police records, on drivers' demeanor, emotional state, prior record, or weapon possession, which if correlated with race, could affect our results.[15] Acquiring such data should be a high priority for future research on race-based policing. That research should be informed by theories capable of explaining the full gamut of racially disparate outcomes of police policy and practice. In our view, Black's theory of law remains a worthy candidate for research that links policing to the continuing significance of race in the United States.

REFERENCES

Alex, Nicholas. 1969. *Black in Blue: A Study of the Negro Policeman*. New York: Appleton-Century Crofts.

Alpert, Geoffrey P., John MacDonald, and Roger G. Dunham. 2005. Police suspicion and discretionary decision making during citizen stops. *Criminology* 43:407–34.

Alpert Group. 2004. *Miami-Dade Police Department Racial Profiling Study*. Final Report. Columbia, SC: Alpert Group.

Anwar, Shamena, and Hamming Fang. 2006. An alternative test of racial prejudice in motor vehicle searches: Theory and evidence. *American Economic Review* 96:127–51.

Avakame, Edem F., James J. Fyfe, and Candace McCoy. 1999. Did you call the police? What did they do? An empirical assessment of Black's theory of the mobilization of law. *Justice Quarterly* 16:765–92.

Bayley, David H., and Harold Mendelson. 1969. *Minorities and the Police*. New York: Free Press.

Bickel, Robert. 2007. *Multilevel Analysis for Applied Research.* New York: Guilford Press.

15. See Brunson (2007), Engel and Johnson (2006), and Rosenfeld, Rojek, and Decker (2012) for discussions of the influence of suspect demeanor on police actions.

Black, Donald. 1976. *The Behavior of Law*. New York: Academic Press.

Black, Donald. 1980. *The Manners and Customs of the Police*. New York: Academic Press.

Black, Donald. 1989. *Sociological Justice*. New York: Oxford University Press.

Black, Donald. 2010. How law behaves: An interview with Donald Black. *International Journal of Law, Crime and Justice* 38:37–47.

Borooah, Vani K. 2011. Racial disparity in police stop and searches in England and Wales. *Journal of Quantitative Criminology* 27:453–73.

Bowers, William J., and Glenn L. Pierce. 1980. Arbitrariness and discrimination under post-furman capital statutes. *Crime & Delinquency* 26:563–635.

Bradbury, Mark D., and J. Edward Kellough. 2008. Representative bureaucracy: Exploring the potential for active representation in local government. *Journal of Public Administration Research and Theory* 18:697–714.

Brown, Robert A., and James Frank. 2006. Race and officer decision making: Examining differences in arrest outcomes between black and white officers. *Justice Quarterly* 23:96–126.

Brunson, Rod K. 2007. Police don't like Black people: African American young men's accumulated police experiences. *Criminology & Public Policy* 6:71–102.

Brunson, Rod K., and Jody Miller. 2006. Young black men and urban policing in the United States. *British Journal of Criminology* 46:613–40.

Capers, I. Bennett. 2008. Policing, race, and place. *Harvard Civil Rights—Civil Liberties Law Review* 44. http://ssrn.com/abstract=1273228.

Close, Billy R., and Patrick L. Mason. 2006. After the traffic stops: Officer characteristics and enforcement actions. *Topics in Economic Analysis and Policy* 6. http://www.bepress.com/bejeap/topics/vol6/iss1/art24.

Close, Billy R., and Patrick L. Mason. 2007. Searching for efficient enforcement: Officer characteristics and racially biased policing. *Review of Law & Economics* 3:263–321.

Cooney, Mark. 2009. *Is Killing Wrong? A Study in Pure Sociology*. Charlottesville: University of Virginia Press.

Copes, Heith, Kent R. Kerley, Karen A. Mason, and Judy Van Wyk. 2001. Reporting behavior of fraud victims and Black's theory of law: An empirical assessment. *Justice Quarterly* 18:343–63.

Decker, Scott H., and Russell L. Smith. 1980. Police minority recruitment: A note on its effectiveness in improving black evaluations of the police. *Journal of Criminal Justice* 8:387–93.

Doyle, Daniel P., and David F. Luckenbill. 1991. Mobilizing law in response to collective problems: A test of Black's theory of law. *Law & Society Review* 25:103–16.

Dulaney, W. Marvin. 1996. *Black Police in America*. Bloomington: Indiana University Press.

Durose, Matthew R., Erica L. Schmitt, and Patrick A. Langan. 2005. *Contacts Between Police and the Public: Findings From the 2002 National Survey*. Washington, DC: U.S. Department of Justice.

Eith, Christine, and Mathew R. Durose. 2011. *The Police and the Public*. Washington, DC: U.S. Department of Justice.

Engel, Robin S., and Jennifer M. Calnon. 2004. Comparing benchmark methodologies for police-citizen contacts: Traffic stop data collection for the Pennsylvania State Police. *Police Quarterly* 7: 97–125.

Engel, Robin S., and Richard Johnson. 2006. Toward a better understanding of racial and ethnic disparities in search and seizure rates. *Journal of Criminal Justice* 34:605–17.

Fridell, Lorie A. 2004. *By the Numbers: A Guide for Analyzing Race Data from Vehicle Stops*. Washington, DC: Police Executive Research Forum.

Fogelson, Robert M. 1968. From resentment to confrontation: The police, the Negros, and the outbreak of the nineteen-sixties riots. *Political Science Quarterly* 83:217–47.

Groves, W. Eugene, and Peter H. Rossi. 1970. Police perceptions of a hostile ghetto. *American Behavioral Scientist* 13:727–43.

Hawkins, Homer, and Richard Thomas. 1991. White policing of black populations: a history of race and social control in America. In *Out of Order: Policing Black People*, eds. Ernest Cashmore and Eugene McLaughlin. New York: Routledge.

Hickman Matthew J., and Brian A. Reaves. 2006. *Law Enforcement Management and Administration Statistics: Local Police Departments, 2003*. Bureau of Justice Statistics, Special Report. Washington, DC: U.S. Department of Justice.

King, Gary, and Langche Zeng. 2001. Logistic regression in rare events data. *Political Analysis* 9:137–63.

Klinger, David. A. 1997. Negotiating order in patrol work: An ecological theory of police response to deviance. *Criminology* 35:277–306.

Kochel, Tammy R., David B. Wilson, and Stephen D. Mastrofski. 2011. Effect of suspect race on officers' arrest decisions. *Criminology* 49:473–512.

Kuykendall, Jack L., and David E. Burns. 1980. The black police officer: An historical perspective. *Journal of Contemporary Criminal Justice* 1:4–12.

Leinen, Stephen. 1984. *Black Police, White Society*. New York: University Press.

Lundman, Robert J. 2004. Driver race, ethnicity, and gender and citizen reports of vehicle searchers by police and vehicle hits: Toward a triangulated scholarly understanding. *Journal of Criminal Law and Criminology* 94:309–50.

Lundman, Robert J. 2010. Are police-reported driving while Black data a valid indicator of the race and ethnicity of the traffic law violators police stop? A negative answer with minor qualifications. *Journal of Criminal Justice* 38:77–87.

Maas, Cora J. M., and Joop J. Hox. 2005. Sufficient sample sizes for multilevel modeling. *Methodology* 1:86–92.

Mastrofski, Stephen D., Michael D. Reisig, and John D. McCluskey. 2002. Police disrespect toward the public: An encounter-based analysis. *Criminology* 40:519–52.

Meehan, Albert J., and Michael C. Ponder. 2002. Race and place: The ecology of racial profiling African American motorists. *Justice Quarterly* 19:399–430.

Meeks, Kenneth. 2000. *Driving While Black*. New York: Broadway Books.

Missouri Revised Statutes. 2011. Title XXI, Chapter 590, Section 650, Paragraph 5. http://www.moga.mo.gov/statutes/C500–599/5900000650.HTM.

National Advisory Commission on Civil Disorders. 1968. *Report of the National Advisory Commission on Civil Disorders*. Washington, DC: U.S. Government Printing Office.

National Research Council. 2004. *Fairness and Effectiveness in Policing: The Evidence*. Committee to Review Research on Police Policy and Practices, eds. W. Skogan and K. Frydl. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academic Press.

Novak, Kenneth J., and Mitchell B. Chamlin. 2012. Racial threat, suspicion, and police behavior: The impact of race and place in traffic enforcement. *Crime & Delinquency* 58:275–300.

President's Commission on Law Enforcement and Administration of Justice. 1967. *Task Force Report: The Police*. Washington, DC: U.S. Government Printing Office.

Reaves, Brian A. 2010. *Local Police Departments, 2007*. Washington, DC: U.S. Department of Justice.

Reaves, Brian A., and Matthew J. Hickman. 2002. *Police Departments in Large Cities, 1990–2000*. Bureau of Justice Statistics, Special Report. Washington, DC: U.S. Department of Justice.

Ridgeway, Greg. 2006. Assessing the effect of race bias in post-traffic stop outcomes using propensity scores. *Journal of Quantitative Criminology* 22:1–29.

Ridgeway, Greg, and John MacDonald. 2009. Methods for assessing racial biased policing. In *Race, Ethnicity, and Policing: New and Essential Readings*, eds. Stephen K. Rice and Michael D. White. New York: New York University Press.

Rosenfeld, Richard, Jeff Rojek, and Scott H. Decker. 2012. Age matters: Race differences in police searches of young and older male drivers. *Journal of Research in Crime and Delinquency* 49:31–55.

Rubinstein, Jonathan. 1973. *City Police*. New York: Farrar, Strauss, and Giroux.

Sklansky, David A. 2006. Not your father's police department: Making sense of the new demographics of law enforcement. *Journal of Criminal Law and Criminology* 96:1209–43.

Skolnick, Jerome H. 1966. *Justice Without Trial*. New York: Wiley.

Spano, Richard. 2003. Concerns about safety, observer sex, and the decision to arrest: Evidence of reactivity in a large-scale observational study of the police. *Criminology* 41:909–32.

Spano, Richard. 2006. Observer behavior as a potential source of reactivity: Describing and quantifying observer effects in a large-scale observational study of the police. *Sociological Methods & Research* 34:521–53.

Stucky, Thomas D. 2005. Local politics and police strength. *Justice Quarterly* 22:139–69.

Sun, Ivan Y., and Brian K. Payne. 2004. Racial differences in resolving conflicts: A comparison between black and white police officers. *Crime & Delinquency* 50:516–41.

Thompson, R. Alan. 2003. *Career Experiences of African American Police Executives: Black and Blue Revised*. New York: LFB Scholarly.

Wagner, Allen E., and Scott H. Decker. 1993. Evaluating citizen complaints against the police. In *Critical Issues in Policing: Contemporary Readings*, 2nd ed, eds. Geoffrey Alpert and Roger Dunham. Prospect Heights, IL: Waveland.

Walker, Samuel. 2001. Searching for the denominator: Problems with police traffic stop data and an early warning system solution. *Justice Research and Policy* 3:63–5.

Watts, Eugene J. 1981. Black and blue: Afro-American police officers in twentieth-century St. Louis. *Journal of Urban History* 7:131–68.

Weitzer, Ronald, Steven A. Tuch, and Wesley G. Skogan. 2008. Police community relations in a majority-black city. *Journal of Research in Crime and Delinquency* 45:398–428.

Wilkins, Vicky M., and Brian N. Williams. 2008. Black or blue: Racial profiling and representative bureaucracy. *Public Administration Review* 68:652–62.

Xie, Min, and Janet L. Lauritsen. 2011. Race context and crime reporting: A test of Black's stratification hypothesis. *Journal of Quantitative Criminology* 26:237–68.

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