

Traffic Stop Encounters: Officer and Citizen Race and Perceptions of Police Propriety

Christopher M. Huggins

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Abstract The continued legacy of racism and discrimination contribute to racial and ethnic differences in attitudes about the police. This research investigates citizen reports of proper police behavior during traffic stops to understand how officer/citizen race and ethnic pairs influence reports of impropriety. Analysis of 6,301 citizen reports of traffic stop encounters with the police from a unique national survey reveals that net of other important explanatory variables, African-Americans are less likely than whites to report proper police behavior when they encounter officers of any race. In addition, citizen reports indicate that the white/black and black/white officer/citizen encounters are significantly less likely to result in a report of proper police behavior than the white/white officer/citizen pairing. The results show limited support for the importance of citizen race and officer/citizen pairs in determining perception of police behavior.

Keywords Police · Race · Citizen reports · Traffic stops

Introduction

Race relations in the United States continue to fuel much sociological and criminological research. Many Americans feel the lingering effects of the historical legacy of racism and discrimination. One area where race still matters is individual perceptions of criminal justice organizations and their actors. African American citizens are more critical and less trusting of the police than other racial groups (Brown and Benedict 2002) and for good reason. African Americans (and other minority groups) often feel harassed and discriminated against by the police, so

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C. M. Huggins (✉)

Department of Sociology, University of Kentucky, 1515 Patterson Office Tower, Lexington, KY
40506-0027, USA
e-mail: christopher.huggins@uky.edu

much so that the term “Driving While Black” has become common parlance for unnecessary and unlawful stops of minority citizens by the police (Lundman and Kaufman 2003). In this climate, even lawful stops are suspected of being a result of race and ethnicity rather than law breaking.

This study examines citizens’ reports of their traffic stop encounters with police. More specifically, this research uses citizen reports of whether police acted properly during traffic stop encounters to examine whether specific officer and citizen race and ethnicity dyads affect how people view police actions, net of other important explanatory measures, ranging from the outcome of the traffic stop (warning, ticket, arrest) to sex of the citizen. A report of proper police behavior indicates there was no perceived unfairness, discrimination, or injustice in the officer’s behavior during the traffic stop.

Beginning with a framework that establishes the importance of traffic stop encounters in how citizens’ view the police, this research then examines previous research on officer and citizen race and ethnicity, including limits of that research. The present research therefore examines the factors affecting citizen reports of proper police behavior during traffic stop encounters with a sustained focus on officer/citizen race and ethnicity pairs.

Theoretical Background

Traffic Stop Encounters

Traffic stops are the single most frequent type of police-citizen encounter (Langan et al. 2001; Lundman 1979). Accordingly, traffic stops are central to citizens’ perceptions of the police (Lundman and Kaufman 2003). Indeed, for many citizens, their only first-hand source of contact with the police occurs during a traffic stop (Bayley 1976).

On the national level, Langan and colleagues (2001) estimate that 19.3 million drivers were stopped by police in 1999 while only 24.5 million people reported any other type of contact. The majority of these 19.3 million drivers (90%) exit these encounters claiming that the police acted properly (Langan et al. 2001; also see Lundman and Kaufman 2003). The remaining 10%, however, report that the police acted improperly. Although a strong majority of citizens report proper police behavior, what causes a citizen to feel otherwise is an interesting avenue for research because it could illuminate biases and perceived discrimination based on a number of factors. This paper endeavors to explain what factors influence reports of police impropriety during traffic stops, including both legal and extralegal factors, and most importantly, officer race, citizen race, and officer/citizen race pairs.

Officer Race and Ethnicity

Previous research on public attitudes has not asked whether officers’ racial backgrounds make a difference during traffic stop encounters (Lundman 1979; Lundman and Kaufman 2003). More general research, however, clearly indicates

that officer race and ethnicity matter. Alex (1969), for instance, establishes that police officers know African-Americans feel police discrimination from both White and African-American police officers, sometimes believing that African-American officers act even more harshly as a way of fitting in with or gaining respect from their White colleagues. African-American citizens also distrust White officers because of their position in an authority structure that keeps them as second-class citizens in U.S. society. African-American officers are similarly distrusted because of the perception that they are selling out their fellow minorities to gain respect from members of the majority group. On the other hand, Leinen (1984) reports that police officers believe White citizens are distrusting of the motives and behaviors of African-American officers because they question their authority and feel African-American officers treat them more harshly as a way to exact revenge on the majority group.

Recent research finds little agreement about which racial category of officer is preferred. An examination of whether citizens prefer police officers of particular races or ethnicities found that neither residents of White neighborhoods nor residents of African-American neighborhoods preferred all-White or all-African-American teams of officers (Weitzer 2000). Instead, most agreed that racially integrated teams of African-American and White officers were preferable “because they help to check or neutralize the proclivities of Black and White officers” (Weitzer 2000: 322). Thus, residents of predominately African-American and White neighborhoods disagreed with the conventional wisdom and public policy of matching officer and neighborhood race (U.S. Department of Justice 1989).

The influence of officer race and ethnicity as a source of citizen perceptions is not without some question. Chandek (1999) finds that officer race does not influence crime victims’ evaluations of police performance. Yet, she does find that expectations of police performance affect crime victims’ evaluations, and these expectations vary by the race and ethnicity of the police officer (Chandek 1999). So, any preconceived notions a citizen has about officers of a certain race or ethnicity can influence their evaluations of officers of that race or ethnicity during future encounters.

Although perceptual differences between officers of different races are important, studies are inconclusive as to whether there are actual behavioral differences between officers of different races. Brown and Frank (2006) find evidence from their observation of officer/citizen interactions that White officers are more likely overall to arrest than Black officers. They also find a difference in policing behavior for officer/citizen race pairs. Black offenders were more likely arrested by Black officers than White officers, while White offenders were more likely arrested by White officers than Black officers (Brown and Frank 2006). Alternatively, Novak (2004) finds that there is no difference in the number of tickets issued during traffic stops based on officer race. Smith and Petrocelli (2001) find that officer race is irrelevant in determining stops, searches, or arrests of drivers. A review of the literature finds some evidence that officer race affects police discretion (Skogan and Frydl 2004). Thus, evidence exists that officer race could influence citizen perceptions of policing behavior, based on actual behavioral differences between officers of different races, although there is some evidence that this is not the case during traffic stops.

Citizen Race and Ethnicity

Recent research establishes the importance of citizen race and ethnicity in determining attitudes toward the police. Hurst et al. (2000), for instance, conducted research on juveniles and found a significant difference between Whites and African-Americans in their attitudes towards the police. African-American juveniles reported less favorable attitudes than Whites, although both groups had more similar opinions when asked about encounters with the police they had experienced. So, while general attitudes were different, when asked about specific encounters, Whites and Blacks were similar in their responses.

A broad literature review of over 100 articles further establishes the consistent effect of race in determining attitudes about the police (Brown and Benedict 2002). Brown and Benedict (2002) find that race, along with age and other contact with the police, are the only individual level variables that consistently affect attitudes about the police. They conclude that interactive effects between race and other variables are not yet fully understood, but that the influence of race on attitudes about the police is clear. Race of citizen can, in part, determine attitudes about and perceptions of the police.

Of course, no discussion of traffic stops and race can ignore the claims of racial profiling exhibited by the phrase “Driving While Black”. A large-scale racial profiling study in North Carolina found significant differences between Black and White citizens in terms of trust of the police. Using citizen surveys, African-Americans reported more distrust of the police in general and their local police (Smith et al. 2003). Personal and vicarious experiences with the police were fundamental in shaping this negative assessment of the police, as well as a more generalized belief in racial profiling. Interestingly, White citizen perceptions of the police were most influenced by a perceived lack of respect from the police officers during encounters. Another study of the same data found evidence of racial profiling among local police officers but less evidence of profiling by state patrol officers (Warren et al. 2006) indicating actual behavioral differences of officers based on citizen race. The widespread assumption that police officer behavior in stopping citizens while driving is altered by prejudice, however, is not without criticism. Engel et al. (2002), in their review of racial profiling literature, point out that race differences in traffic stops could be the result of legal and situational, rather than extralegal factors. Ultimately, whether, or to what degree racial profiling occurs, is less important than the fact that a perception of mistreatment exists among some Black citizens that could influence their perceptions of police behavior during individual traffic stops.

Officer/Citizen Race and Ethnicity Interactions

Other research also establishes the importance of the race and ethnicity of the citizen and officer in determining attitudes toward the police due to problematic interactions. The idea of deference exchange centers upon the notion that people of lower status defer to those of higher status. For example, men expect to be deferred to by women, the old expect to be deferred to by the young, and the rich expect to be deferred to by the poor. In policing situations, these societal norms for

deference exchange can break down. Sykes and Clark (1975) note that “[o]fficers expect to be deferred to by citizens occupying a lower or damaged status” (599). It may be the case that minority citizens, however, often fail to give this expected deference because to advance the expected deference is to risk signaling acceptance of the unequal racial stratification of society. According to Lanza-Kaduce and Greenleaf (2000), minority citizens come into conflict with the police more often than citizens of other races and ethnicities. This conflict may partially result from the problematic deference exchange between a minority citizen and police officers of any race or ethnicity. The deference exchange between minority citizens and the police is complicated by the status minorities hold in society and the history of oppressive treatment by police concurrent with that status (Lanza-Kaduce and Greenleaf 2000). This could lead to perceptual differences of policing behavior.

Other research has also found a difference between the behavior of citizens of different races when encountering officers of different races. One study found that minority officers were actually less likely to make White citizens compliant, while White officers were more likely to make minority citizens compliant (Mastrofski et al. 1996). This is challenged by another study that found White officers struggled with noncompliant minority citizens (Engel 2003). Although the actual interaction of officer and citizen race and ethnicity may not be fully understood, it is important to account for in a study of traffic stops.

Both officer and citizen race matter, then, and the combination of officer and citizen race and ethnicities matter, in determining attitudes about the police during traffic stop encounters. This is a result of conflict that may arise from any or all of the following: problematic deference exchange, general preconceptions about the police, direct or vicarious experiences with the police. Unfortunately, an explicit test of the deference exchange model is problematic, as there is no measure of demeanor in the analyzed data. Instead, deference exchange, like prior experience or preconceptions of the police, is one possible framework for understanding how traffic stop encounters result in reports of improper police behavior. Still, knowledge of how both officer race and citizen race, while also accounting for traffic stop characteristics, can impact a determination of police behavior is needed for a full understanding of how race, policing, and feelings of discrimination relate.

Limits of Previous Research

There are three important limits of previous research. First and most importantly, no research exists that looks at the effect of combinations of officer and citizen race and ethnicity on citizen perceptions of police behavior during encounters. The early studies of the unique position of African-American officers (Alex 1969; Leinen 1984) established that officers of different races perceived differences in citizens’ general attitudes toward police officers, often along racial lines. Similarly, the race of the citizen also mattered in determining how citizens felt about the police. Both Alex (1969) and Leinen (1984), for instance, showed how African-American police officers felt more criticized than their White colleagues by both African-American and White citizens. Sykes and Clark (1975) identified how their theory of deference exchange could apply to encounters between police officers and citizens of different

races and ethnicities as well as why some encounters are more likely to result in conflict between officers and citizens. They fail to identify how this deference exchange and varying likelihood for conflict directly influences how the citizen feels about the encounter. So, although previous research has separately examined the effects of citizen race and officer race on attitudes about the police, to this point, no previous research has directly examined the effect of various officer/citizen race and ethnicity dyads. The present research aims to fill this gap.

Second, police have collected much of the traffic stop data in response to concern over racial profiling (Meeks 2000). This fails to address the citizen perspective. The present research uses citizen reports to overcome this limitation. It is important to acknowledge that citizen perceptions can be flawed, however. This study necessitates the use of citizen perceptions because it explores the difference in likelihood of reporting proper police behavior. Police officers are unlikely to characterize much of their work during traffic stops as improper.

Finally, several studies have looked at general attitudes about the police (Weitzer and Tuch 1999; Weitzer 1999, 2000) without looking at attitudes about particular encounters, such as traffic stops. Particular encounters involve officers and citizens of particular races and ethnicities so the specific officer/citizen race and ethnicity dyad is known unlike when general attitudes are polled. One study that has looked at traffic stop encounters did not look at specific officer/citizen dyads (Engel 2005). Hence, the effect of the officer/citizen dyad will become much more apparent by looking at individual traffic stops, the most common encounter between police and citizens (Langan et al. 2001; Lundman 1979) and thus a primary source of citizen perceptions of police.

The present research, therefore, explores how officer/citizen race and ethnicity dyads influence citizen perceptions of proper police behavior during traffic stop encounters. It uses citizen reports collected from a nationally representative sample, includes measures of combinations of officer and citizen race and ethnicity, and controls for relevant traffic stop and extralegal factors.

Data and Methods

This research analyzes the *Contacts between Police and the Public: Findings from the 1999 National Survey* (hereafter “CBPP 1999”). The CBPP 1999 is a nationally representative sample collected as a supplement to the National Crime Victimization Survey (NCVS) (Langan et al. 2001). The CBPP 1999 sample consists of respondents 16 years or older, who were interviewed as part of the NCVS. After answering questions about criminal victimization, respondents were then asked about contacts they had with the police in the last year.

Of the 80,543 respondents of the CBPP 1999, 7,034 reported at least one traffic stop in which they were the driver in the previous 12 months. When respondents reported more than one traffic stop, they were asked about the most recent traffic stop. Of the 7,034 respondents with at least one traffic stop, 6,301 are included in the current study after listwise deletion of cases containing missing data and exclusion of cases where officer race was reported as unknown or a mixed team of officers.

Limits of the CBPP 1999 Data There are two important limits to the CBPP 1999 data. First, they are grounded exclusively in citizen-reports of encounters with police. This means that all information about the traffic stop encounter is subjective to the citizen respondent and therefore open to errors in memory and interpretation. However, scholars have long relied upon citizen self-reports for their images and understandings of crime, criminals, and criminal justice (see Farrington et al. 1996; Bachman et al. 2001). Accordingly, turning to citizens for data on police behavior during traffic stops is simply a continuation of long-standing scholarly practice.

Second, the CBPP 1999 data do not contain information on driver or officer demeanor. However, there is some disagreement in the scholarly literature over whether demeanor actually affects police actions (please see Klinger 1996, 1994; Engel et al. 2000). Unfortunately, the lack of a demeanor variable does preclude a true test of a deference exchange model.

Previous Analyses Using the CBPP 1999 Data At least four previous analyses of the CBPP 1999 data have been published (Engel 2005; Engel and Calnon 2004; Lundman 2004; Lundman and Kaufman 2003). However, omitted from all three of these analyses was direct examination of the effects of officer and citizen race and ethnicity pairings on citizen perceptions of proper police actions during traffic stop encounters. The present research remedies that omission.

Dependent Measure and Data Estimation Issues

The dependent measure is a dichotomous variable indicating a respondent's answer to the question: "Looking back at (this/the most recent) incident, do you feel the police behaved properly or improperly?" (Langan et al. 2001). The responses are coded as yes = 1, no = 0 (see Table 1 for operationalizations of all measures). Obviously, this dependent measure is a subjective evaluation of police propriety. Differences in reports of police propriety do not necessarily represent differences in police behavior, but only the differences in citizen perception, and, thus, are open to interpretation of what a citizen believes is proper behavior. Still, differences in citizen perceptions may reveal preconceived notions of police mistreatment, especially when controlling for important stop variables.

Using a sample of 6,301 cases from an original sample of 80,543 cases presents the possibility of sample selection bias (Berk 1983). To overcome this problem, this analysis attempted to use a bivariate probit regression model because perceptions of proper police behavior are only reported by those involved in traffic stops. The model failed to converge, however, due to the estimated error correlations approaching perfect correlation. To correct for this, the present research follows Lundman and Kaufman (2003) and controls for a case's likelihood of being selected into the restricted sample (Berk 1983). The analysis includes a measure of police contact other than during a traffic stop to control for bias in the selected sample as compared to the total sample. This dichotomous measure controls for how respondents differ in their likelihood of encountering the police (1 = yes, 0 = no).

Table 1 Operationalizations of dependent, independent, and control variables

| | |
|------------------------------------|---|
| Dependent Variable | |
| Properly | Did police behave properly? (0 = no, 1 = yes) |
| Independent Variables | |
| Officer race and ethnicity | Dummy variables for officer race (0 = White, 1 = Black or Other) |
| Driver race and ethnicity | Dummy variables driver race (0 = non-Hispanic White, 1 = non-Hispanic Black, Hispanic, or non-Hispanic Other) |
| Officer/Citizen dyads | Dummy variables for officer/citizen race (0 = White/White, 1 = Black/Black, Black/Hispanic, Black/other, Black/White, other/Black, other/Hispanic, other/other, other/White, White/Black, White/Hispanic, or White/other) |
| Respondent Variables | |
| Other contact with police | Any contact other than traffic stop? (0 = no, 1 = yes) |
| Driver sex | 0 = male, 1 = female |
| Driver age | Respondent's age in years |
| Driver social class | Dummy variables for income (0 = below average income (below \$20,000), 1 = high income (\$50,000 or more) or average income) |
| Frequency of traffic stops | Number of times stopped in last 12 months |
| Size of place | Dummy variables for place (0 = not an MSA, 1 = MSA central city or MSA non-central city) |
| Stop Variables | |
| Number of officers present | Number of officers present during traffic stop |
| Number of vehicle occupants | Dummy variables for occupants (0 = one occupant, 1 = two occupants or three or more occupants) |
| Legal Reason for Traffic Stop | Dummy variables for reason (0 = speeding, 1 = equipment check, check driver, suspected of something, other moving violation, or other reason or unknown) |
| Legitimate reason for Traffic Stop | Legitimate reason for stop? (0 = no, 1 = yes) |
| Nonroutine Traffic Stop Encounter | Was the traffic stop nonroutine? (0 = no, 1 = yes) |
| Ticket | Was respondent given a ticket? (0 = no, 1 = yes) |

Control Measures

Driver sex, age, and social class are controlled for in the analysis. Sex is a dichotomous variable with male as the reference category. Age is a continuous variable. Social class is measured using a three part dummy variable, with below average class as the reference. All operationalizations are described in Table 1.

Drivers that are more frequently pulled over, regardless of how they actually drive or the level of suspicion they induce, may feel they are being harassed and therefore may be less likely to report proper police behavior. To account for this, the number of times a respondent reports being pulled over in the last 12 months is included. Drivers may be more frequently pulled over in areas that have more police officers. Size of place where the respondent lives is included to control for differences in amount of time allowed for traffic patrol and potential differences in how police forces treat citizens in different locations (central city or other places). Police in

larger cities often have concerns other than enforcing traffic laws that police in less populated areas do not have (Bayley 1994). Also, police in more heavily populated areas treat citizens more harshly and more impersonally than in smaller areas (Barker 1999: 36). Although an indication of where the citizen lives does not tell where the traffic stop took place, most driving takes place near a person's residence (U.S. Bureau of the Census 2001: 631). Accordingly, most traffic stops take place near where a citizen lives.

Respondents indicated where they lived and the CBPP 1999 reports this information in three categories. These three categories are coded as dummy variables: Metropolitan Statistical Area (MSA) central city (yes = 1, no = 0) and MSA non-central city (yes = 1, no = 0). Places not designated as an MSA are the reference category.

Stop variables are also controlled. Respondents were asked how many police officers were present during their traffic stop. Traffic stops with many officers may prove intimidating. Therefore, an interval measure of the number of officers present is included. The CBPP 1999 asked respondents about the number of occupants in the vehicle at the time of the traffic stop. Individuals driving with others may feel more uncomfortable or embarrassed in a traffic stop than if he or she is driving alone. Alternatively, officers who must deal with more than one individual during a traffic stop may alter their behavior, to appear more authoritative or "prove a point". To control for this, two dummy measures of the number of occupants are included, for stops involving cars with two occupants and for stops involving cars with three or more occupants. One occupant is the reference category.

Perceptions of police propriety can also be influenced by the reason given for a traffic stop and whether that reason was perceived to be legitimate by the driver. To control for this, dummy measures of the legal reason for the traffic stop are incorporated, including equipment check, check driver, driver suspected of something, moving violation other than speeding, and other reason or unknown. Those pulled over for speeding, by far the most common reason for a traffic stop, are the reference category. The given reason for a traffic stop can be interpreted differently. For example, a driver may feel harassed if he or she is pulled over for being "suspicious", but less so if pulled over for speeding or some other moving violation. Alternatively, if the driver is pulled over for speeding and knows he or she was not, this could still produce negative feelings towards the police officer. Therefore, a second variable is included to control for whether or not the respondent felt the traffic stop was a legitimate exercise of police authority (1 = legitimate, 0 = not legitimate). The inclusion of this variable also controls for perceptions of the police respondents hold before the traffic stop. Traffic stop encounters with the police in particular are contentious because of issues like "Driving While Black" and a common, if debatable, belief that drivers are harassed based on the lines of race. It is instructive to note that African-American respondents were significantly more likely to report no legitimate reason for the traffic stop than White respondents. But, the legitimate reason for a stop and evaluation of police behavior during the stop are unique concepts. Even among respondents who reported that police had no legitimate reason for the traffic stop, a majority (63.3%) still believed the police acted properly during the stop. While there are respondents who base their evaluation of the police on their motives for the traffic stop, most must not. Because

this paper is about the factors during the traffic stop itself that influence citizen perceptions, the legitimate reason variable must be included to control for these prior influences on that perception.

Similarly, a measure is included to control for whether or not a traffic stop was “routine”. A routine traffic stop does not include any unusual legal or other circumstance stemming from the initiation of the traffic stop to its conclusion that is outside the typical unfolding of a traffic stop. Traffic stop encounters were defined as nonroutine when a respondent answered that the reason for the stop was a roadside sobriety checkpoint, when a respondent had their vehicle searched, when a respondent had their person searched, and when the respondent was arrested. Other less frequent instances that yielded a nonroutine traffic stop definition include when police officers drew their guns on a respondent or when a driver reported resisting arrest. Nonroutine traffic stops are included as a dummy measure (nonroutine = 1, routine = 0)

A measure of traffic stop outcome is also included. If a driver is issued a ticket that they believe is unjustified, they may perceive the police behaved improperly. Conversely, a driver issued a warning may report that the officer behaved properly due to the leniency of the treatment. For these reasons, a dummy variable is included to control for whether a ticket was issued (1 = yes, 0 = no).

Explanatory Measures

The measure of officer race and ethnicity in the CBPP 1999 was constructed by combining the race and ethnicity reported by the respondents for single officer encounters and the races and ethnicities reported for multiple officer encounters. In the multiple officer encounters, the modal race or ethnicity was used when multiple officer races and ethnicities were present. Citizens reported if multiple officers were all White, mostly White, all Black, mostly Black, or equally mixed. Cases reporting “all White” or “mostly White” were coded as White officer. Cases reporting “all Black” or “mostly Black” were coded as Black officer. Two dummy variables are created to measure officer race and ethnicity, Black and other. White is the reference category. Unfortunately, the CBPP 1999 does not provide information on whether an officer is from any other specific racial group.

At the center of this study is the hypothesis that reports of proper police behavior vary by officer/citizen race and ethnicity pairings. This variation relates to the race and ethnicity of the citizen and whether or not the respondent encountered an officer of either the same or different race and ethnicity. Citizen race and ethnicity alone, however, still has an important effect on perceptions of police behavior (Lanza-Kaduce and Greenleaf 2000; Sykes and Clark 1975). A measure of citizen race and ethnicity is constructed from the respondent’s self-identification as either non-Hispanic Black, Hispanic, non-Hispanic White, or some other non-Hispanic race or ethnicity. These self-identifications were transformed into three dummy variables: non-Hispanic Black, Hispanic, and non-Hispanic other. Non-Hispanic Whites are the reference category.

To capture how citizen reports of police behavior are affected by both officer and citizen races and ethnicities, 12 dummy variables are created to capture all possible combinations of officer race/ethnicity and citizen race/ethnicity. The different dyads

are Black/Black, Black/Hispanic, Black/other, Black/White, other/Black, other/Hispanic, other/other, other/White White/Black, White/Hispanic, and White/other, with the reference category being White/White.

Statistical Analysis

As the dependent variable is dichotomous, binary logistic regression models are estimated (Long 1997). Specifically, three models are estimated that include the control variables and combinations of citizen race and officer race. The first model includes the control variables and officer race dummy variables. The second model examines the control and citizen race dummy variables. The final estimated model contains the control variables and all officer/citizen race pair dummy variables.

Results

Table 2 presents the percent of respondents reporting proper police behavior by control and explanatory measures. Z-tests indicate whether these differences are significant. The largest differences show the importance of controlling for the citizen perception of whether a traffic stop was legitimate, for the reason given for a traffic stop, and for whether the traffic stop was routine. For the explanatory measures, non-Hispanic Black respondents, Hispanic respondents, and respondents involved in traffic stops with Black/Black, White/Black, or White/Hispanic officer/citizen pairs are all significantly different than their respective reference groups.

Explanatory Measures

Table 3 presents the results from the logistic regressions predicting reports of proper police behavior during traffic stops. Model 1 in Table 3 includes predominant officer race at the scene of the traffic encounter. Neither officer category is significantly different than White officer. Model 2 in Table 3 includes respondent race. Black drivers are the only group significantly different than White drivers in their likelihood of reporting proper police behavior. Black drivers are less likely to report proper police behavior than White drivers. Model 3 includes dummy variables for all officer/citizen pairs (White/White is the reference group). Traffic stops involving Black/White and White/Black dyads are significantly less likely to result in reports of proper police behavior than traffic stops involving the White/White dyad. Most of the pairings are not significantly different from the reference category, perhaps demonstrating unreliable estimates from their relative infrequency of observation. Interestingly, the Black/Black dyad, which was significantly different from White/White in the bivariate, is now not significantly different. This seems to indicate that the Black/Black dyad generates more reports of improper behavior, but only because those stops involve more of the control measures that may lead to those reports. Once those are controlled for, the effect disappears.

Table 2 Percent reporting police acted properly, by explanatory measures: PPCS 1999 data ($N=6,301$)

| Explanatory measure | Total N | Reporting proper police behavior | |
|---|------------|----------------------------------|-------|
| | | N | % |
| Other contact with police | | | |
| Yes | 1,652 | 1,460 | 88.4* |
| No | 4,649 | 4,194 | 90.2 |
| Driver sex | | | |
| Female | 2,642 | 2,430 | 92.0* |
| Male | 3,659 | 3,224 | 88.1 |
| Driver age⁺ | | | |
| At or Below Mean | 3,434 | 3,066 | 89.3 |
| Above Mean | 2,867 | 2,588 | 90.3 |
| Driver social class | | | |
| High Income | 2,466 | 2,234 | 90.6* |
| Medium Income | 2,173 | 1,954 | 89.9 |
| Low Income | 1,662 | 1,466 | 88.2 |
| Frequency of traffic stops⁺ | | | |
| At or Below Mean | 5,108 | 4,638 | 90.8* |
| Above Mean | 1,193 | 1,016 | 85.2 |
| Size of place | | | |
| MSA Central City | 1,664 | 1,458 | 87.6* |
| MSA non-Central City | 3,673 | 3,304 | 90.0* |
| Not an MSA | 964 | 892 | 92.5 |
| Number of officers present⁺ | | | |
| At or Below Mean | 5,251 | 4,795 | 91.3* |
| Above Mean | 1,050 | 859 | 81.8 |
| Number of vehicle occupants | | | |
| Three or More Occupants | 420 | 354 | 84.3* |
| Two Occupants | 1,170 | 1,031 | 88.1* |
| One Occupant | 4,711 | 4,269 | 90.6 |
| Reason for Stop | | | |
| Check Equipment | 654 | 581 | 88.8* |
| Check Driver | 594 | 560 | 94.3 |
| Suspected | 127 | 95 | 74.8* |
| Other Moving Violation | 1,419 | 1,215 | 85.6* |
| Other Reason | 268 | 177 | 66.0* |
| Speeding | 3,239 | 3,026 | 93.4 |
| Legitimate Reason for Stop | | | |
| Yes | 5,033 | 4,851 | 96.4* |
| No | 1,268 | 803 | 63.3 |
| Nonroutine Stop | | | |
| Yes | 652 | 460 | 70.6* |
| No | 5,649 | 5,194 | 91.9 |

Table 2 (continued)

| Explanatory measure | Total N | Reporting proper police behavior | |
|----------------------------|------------|----------------------------------|-------|
| | | N | % |
| Ticket Issued | | | |
| Yes | 3,353 | 2,983 | 89.0* |
| No | 2,948 | 2,671 | 90.6 |
| Driver race and ethnicity | | | |
| Non-Hispanic Black | 617 | 506 | 82.0* |
| Hispanic | 555 | 482 | 86.8* |
| Non-Hispanic Other | 199 | 178 | 89.4 |
| Non-Hispanic White | 4,930 | 4,488 | 91.0 |
| Officer race and ethnicity | | | |
| Black | 446 | 390 | 87.4 |
| Other | 175 | 152 | 86.9 |
| White | 5,680 | 5,112 | 90.0 |
| Officer/citizen dyads | | | |
| Black/Black | 108 | 91 | 84.3* |
| Black/Hispanic | 34 | 29 | 85.3 |
| Black/Other | 12 | 10 | 83.3 |
| Black/White | 292 | 260 | 89.0 |
| Other/Black | 13 | 10 | 76.9 |
| Other/Hispanic | 34 | 29 | 85.3 |
| Other/Other | 23 | 19 | 82.6 |
| Other/White | 105 | 94 | 89.5 |
| White/Black | 496 | 405 | 81.7* |
| White/Hispanic | 487 | 424 | 87.1* |
| White/Other | 164 | 149 | 90.9 |
| White/White | 4,533 | 4,134 | 91.2 |
| Total | 6,301 | 5,654 | 89.7 |

Except for the interval variables age, number of traffic stops, number of officers present, the last category in each explanatory measure is the reference group in the multivariate model

+ Variable continuous in multivariate models

* Z-test significant at the .05 level, single-tailed.

Control Measures

Looking at respondent characteristics, there is little variation in effects across the three models. The sample selection bias measure, contact with the police other than during a traffic stop, is not significant, meaning that those with other police contacts are similar to those without other police contacts in terms of their approval of police behavior. Unlike previous research (Weitzer and Tuch 2002), social class has no effect in these models. This could be a result, however, of the crude measure of class available in the CBPP 1999 data. As expected, drivers who have been stopped more

Table 3 Logistic regression for predicting reports of proper police behavior during traffic stops by respondent characteristics, stop variables, officer race and ethnicity, respondent race and ethnicity and officer/citizen race and ethnicity pairs^a

| Variables | Model 1 | | | Model 2 | | | Model 3 ^b | | |
|---|-----------|------|------------|-----------|------|------------|----------------------|------|------------|
| | B | s.e. | Odds ratio | B | s.e. | Odds ratio | B | s.e. | Odds ratio |
| Respondents Characteristics | | | | | | | | | |
| Other contact | .023 | .107 | 1.023 | .020 | .108 | 1.020 | .024 | .108 | 1.024 |
| Female | .143 | .102 | 1.154 | .154 | .102 | 1.166 | .152 | .103 | 1.165 |
| Age | .000 | .004 | 1.000 | .000 | .004 | 1.000 | .000 | .004 | 1.000 |
| High Income | -.072 | .122 | .931 | -.091 | .124 | .913 | -.088 | .124 | .916 |
| Average Income | -.003 | .122 | .997 | -.010 | .122 | .990 | -.014 | .123 | .986 |
| Stops This Year | -.070* | .032 | .932 | -.068* | .032 | .935 | -.071* | .032 | .931 |
| MSA Central City | -.390* | .169 | .677 | -.361* | .172 | .697 | -.365* | .172 | .694 |
| MSA Non-Central | -.314* | .158 | .730 | -.312* | .159 | .732 | -.309* | .159 | .734 |
| Stop Variables | | | | | | | | | |
| Number of Officers Present | -.002 | .034 | .998 | .003 | .034 | 1.003 | .002 | .034 | 1.002 |
| Two Occupants | -.266* | .121 | .766 | -.266* | .121 | .766 | -.273* | .122 | .761 |
| Three Occupants | -.338* | .175 | .713 | -.319* | .175 | .727 | -.328* | .175 | .720 |
| Check Equipment | -.525** | .173 | .591 | -.522** | .174 | .593 | -.526** | .175 | .591 |
| Check Driver | .263 | .225 | 1.301 | .248 | .225 | 1.281 | .258 | .225 | 1.294 |
| Suspected | -.594* | .277 | .552 | -.601* | .277 | .548 | -.589* | .278 | .555 |
| Other moving violation | -.356** | .121 | .700 | -.365** | .121 | .694 | -.360** | .122 | .698 |
| Other reason | -.219 | .183 | .803 | -.242 | .183 | .785 | -.238 | .184 | .788 |
| Legitimate Reason | 2.600*** | .104 | 13.461 | 2.577*** | .105 | 13.159 | 2.585*** | .105 | 13.264 |
| Nonroutine stop | -1.426*** | .132 | .240 | -1.419*** | .132 | .242 | -1.426*** | .132 | .240 |
| Ticket issued | -.710*** | .111 | .492 | -.709*** | .111 | .492 | -.700*** | .111 | .497 |
| Predominant Officer Race and Ethnicity | | | | | | | | | |
| Black | -.268 | .177 | .765 | – | | | – | | |
| Other | -.222 | .260 | .801 | – | | | – | | |
| Driver Race and Ethnicity | | | | | | | | | |
| Non-Hispanic Black | – | | | -.283* | .143 | .753 | – | | |
| Hispanic | – | | | -.017 | .164 | .983 | – | | |
| Non-Hispanic Other | – | | | -.013 | .263 | .987 | – | | |
| Officer/Citizen Pair | | | | | | | | | |
| Black/Black | – | | | – | | | .006 | .332 | 1.006 |
| Black/Hispanic | – | | | – | | | -.504 | .560 | .604 |
| Black/Other | – | | | – | | | -.832 | .900 | .435 |
| Black/White | – | | | – | | | -.413* | .224 | .661 |
| Other/Black | – | | | – | | | -.442 | .744 | .642 |
| Other/Hispanic | – | | | – | | | -.237 | .542 | .789 |

Table 3 (continued)

| Variables | Model 1 | | | Model 2 | | | Model 3 ^b | | |
|---------------------------|----------|------|------------|----------|------|------------|----------------------|------|------------|
| | B | s.e. | Odds ratio | B | s.e. | Odds ratio | B | s.e. | Odds ratio |
| Other/Other | – | | | – | | | –.341 | .597 | .711 |
| Other/White | – | | | – | | | –.214 | .376 | .808 |
| White/Black | – | | | – | | | –.370** | .155 | .690 |
| White/Hispanic | – | | | – | | | .004 | .176 | 1.004 |
| White/Other | – | | | – | | | .093 | .307 | 1.098 |
| Intercept | 1.924*** | .267 | 6.850 | 1.932*** | .268 | 6.904 | 1.962*** | .269 | 7.113 |
| Nagelkerke R ² | .347 | | | .347 | | | .349 | | |

*** $p < .001$, ** $p < .01$, * $p < .05$ one-tailed

^a Dependent variable coded 1 = proper police behavior

^b Model 3 includes all officer/citizen pairs (White/White is reference group).

often in the last year are significantly less likely to report proper police behavior. This suggests that individuals who are disproportionately pulled over perceive more harassment by the police (Lundman and Kaufman 2003). Also as expected, both central city and non-central city residents are significantly less likely than those from non-metropolitan areas to report proper police behavior.

The stop variables operate in a manner consistent with prior research. The significant stop characteristics show that what occurs during a stop can influence perceptions of proper police behavior. In fact, the strongest predictors were stop variables. As the number of vehicle occupants increases, the likelihood of a report of proper police behavior decreases, possibly due to the embarrassment felt by the driver by being pulled over or a change in police behavior that comes with dealing with many vehicle occupants. The reason for a traffic stop is also important. Those given less substantial reasons than speeding, such as equipment check or driver suspected of something, are less likely to believe the police acted properly. These respondents may feel the police were more discriminatory than those pulled over speeding. More evidence of this can be seen in the fact that those who felt the police had a legitimate reason for the stop were more likely to believe the police acted properly.

Also, any discrepancy from a “routine” traffic stop decreases the likelihood of a report of proper police behavior. Being searched, whether body or car, getting arrested or being threatened with arrest or any other nonroutine characteristic leads to more reports of police impropriety. This comes as little surprise because these are all aspects of a traffic stop encounter that are likely to leave an individual with negative feelings about the traffic stop, either because the respondents felt their rights were violated (in the case of searches) or because the respondents received punishment (in the case of arrest or the threat of arrest. Further evidence of this is seen in the ticket measure, where those who receive citations are less likely to believe the police acted properly. Escaping punishment will likely result in positive feelings about the police behavior during the traffic stop.

Another predictor of citizen reports of police propriety during traffic stops is whether the driver feels there was a legitimate reason for the traffic stop. The odds ratio show how powerful this perception is in shaping the ultimate determination of whether police behaved properly during a traffic stop, as those citizens perceiving a legitimate reason for a traffic stop are several times more likely to report proper police behavior. Clearly, those that feel that the police had a legitimate reason that precipitated the traffic stop are more likely to report proper police behavior during that traffic stop. It is important to note, however, that even among those who questioned the legitimacy of the stop, more than half reported proper police behavior.

Discussion

The results of model 1 show that officer race alone is not a significant predictor of citizen reports of police propriety. Consistent with prior research, however, citizen race is a significant predictor of the likelihood of reports of proper police behavior during traffic stops (Lundman and Kaufman 2003; Weitzer 2000) as seen in model 2. Odds ratios indicate Black drivers are 28% less likely than Whites to report proper police behavior. The relationship between officer race and ethnicity and citizen race and ethnicity is further explored in model 3.

The findings on the intersection between officer race and citizen race are more complex, with three important observations. First, the least likely dyads to report proper police behavior are Black/White and White/Black. Odds ratios indicate that Black/White stops are 49% less likely to result in reports of proper police behavior, while White/Black stops are 37% less likely. These two officer/citizen pairs represent problematic encounters between police and citizen. Excluding the possibility of racially biased policing, the former is problematic because of perceived discrimination, while the latter is a reversal of typically expected deference exchange. Second, there is limited support for the idea that homogeneous dyads are more likely to report proper police behavior than other dyads. None of the homogeneous pairs were significantly different than the White/White reference category. In Table 2, however, Black/Black cases report percentages of proper police behavior less than several of the heterogeneous categories. One possible explanation for this is the unique position of minority officers in our society (Alex 1969; Leinen 1984). While some minority citizens are more comfortable with officers of their own race, other citizens perceive that minority officers target minority citizens as a way of placating and fitting in with their predominately White colleagues (Weitzer 1999). This could result in fewer reports of proper police behavior during encounters involving African-American officers and African-American citizens as compared to encounters involving White officers and White citizens. Third, the White/Black dyad is the least likely to report proper police behavior as can be seen in model 3 of Table 3, where the effect of the White/Black dyad is significantly negative and results in the lowest percentage of reports of proper police behavior of any dyad with more than 20 cases. The White officer/Black driver dyad lends credence to the idea that both the race of the officer and the race of the citizen interact in their influence on reports of proper police behavior. If only citizen race mattered, all officer/citizen

race and ethnicity dyads that included Black citizens would be significantly less likely to report proper police behavior, but that is not the case. It is interesting to note that the Black/Hispanic and White/Hispanic dyads are not significant, perhaps due to infrequency of observation or perhaps signaling the unique position of African-American citizens as a racial minority.

The results of the present research are important examples of how citizens of different races differ in their view of police behavior. Although a strong majority of all citizens, regardless of race, report proper police behavior during traffic stops, there are certain officer/citizen race pairings during traffic stops that increase the possibility of dissatisfaction. In general, African-American citizens are less likely to feel police behave properly during traffic stops than White citizens, but this likelihood diminishes further when African-American citizens interact with White officers. Whether this results from perceived harassment and mistreatment such as the publicized “Driving While Black” phenomena, simple distrust of the police, or actual improper treatment, is, unfortunately, beyond the scope of this data. There is some evidence that this a priori perception is influencing this data. For example, as stated above, African-American citizens were less likely than White citizens to report the police had a legitimate reason to stop them. But, the focus of this paper is not on whether “Driving While Black” exists or even whether the perception of the phenomenon exists. Instead, the results of this analysis reveal that even when controlling for stop variables, race matters in how citizens perceive police behavior during specific encounters. While these data are about traffic stops, the most common police/citizen interaction, race likely influences all police/citizen interactions, especially more tense or stressful interactions. Police, then, must be aware of their behavior and the perceptions that surround their behavior when dealing with citizens, especially citizens of color.

This small racial difference in reports of police impropriety during traffic stops needs to be addressed through policy. The two most plausible causes of this race effect are actual behavioral differences by the police and perceptual differences fueled by old claims of harassment and mistreatment. In regards to the former, Fridell and colleagues (2001) recommend six areas of action to combat issues of racially biased policing. These areas include the accountability and supervision of officers, establishing explicit policies designed to eliminate racially biased policing, changing recruitment and hiring practices, increasing education and training, reaching out to minority communities, and continuing funding for data collection and analysis (Fridell et al. 2001). Presumably, enacting these policies would reduce racially biased police behavior as a potential cause of the race effect. Of course, these recommendations are to combat racially biased policing itself and may be ineffectual in reducing the perception of racially biased policing that could maintain the race differences in evaluation of police behavior that have been reported here. Shifting perceptions may prove to be the more difficult task.

Research has also looked at what can increase citizen satisfaction with policing. Weitzer (1999) finds that integrated teams of officers are the preferred racial composition of officer teams by both respondents from primarily White and African-American neighborhoods. This is somewhat confounding to the finding that Black/White and White/Black officer/citizen traffic stops resulted in significantly less reports of proper police behavior. But, as the current results indicate, the answer to

increasing citizen satisfaction with police behaviors may not be what race of officers police a certain neighborhood, but what the police represent to the residents of that neighborhood and how the officers attempt to improve upon any negative stereotypes. Although officer behavior during traffic stops with minority citizens may explain some of the race and ethnicity difference in reporting proper police behaviors, it does not explain all of the difference. Perception of police also matters, and thus, why those perceptions would vary by race. Police are only part of the problem, and hence only part of the solution. These preconceptions would only change when there is less evidence, anecdotal or empirical, that police engage in racial discrimination.

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Christopher M. Huggins received his B.A. in sociology from Transylvania University and M.A. and PhD. from The Ohio State University. His research interests include crime, criminal justice, deviance, and neighborhood effects. He is currently teaching at the University of Kentucky.