POLICE SUSPICION AND DISCRETIONARY DECISION MAKING DURING CITIZEN STOPS

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This study examines the influence of racial, demographic and situational variables on types of police suspicion and the ancillary decision to stop and question suspects. Data were drawn from an observational study of police decision making in Savannah, Georgia. Based on the literature, we hypothesized that minority suspects will be more likely to be viewed suspiciously by the police for nonbehavioral reasons. We also hypothesize that minority status will play a significant role in the decision to stop and question suspicious persons. The findings from this study provide partial support for these hypotheses. The results indicate that minority status does influence an officer’s decision to form nonbehavioral as opposed to behavioral suspicion, but that minority status does not influence the decision to stop and question suspects. We discuss the implications of these findings for understanding race and its role in police decision making.

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Current theory and research on the use of discretion and biased policing make few references to the situational processes through which police determine behaviors to be suspicious and which, consequently, initiate official police action. Research on police behavior and the exercise of social control typically focuses on police actions after a contact with a citizen has been initiated, and tends to examine the subsequent courses of action police officers take (for example, citizen stop, citation, arrest, use of force and the like) (see Harris, 1999; Mastrofski et al., 2000; Smith and Petrocelli, 2003; Lundman and Kaufman, 2003; Gould and Mastrofski, 2004). Prior to the encounter, and the ensuing series of decision making points through the maze of the criminal justice system, a police officer typically forms a suspicion that a suspect is engaged in, or about to be engaged in, illegal behavior. Consequently, it is this earliest stage, an officer's formation of suspicion before identifying and stopping a citizen, that has the most profound consequences for the citizens in the criminal justice system.

Interestingly, criminological literature offers no empirical assessments of the social processes through which police officers form suspicions. At the core of the controversy surrounding issues such as racial profiling (Wilson, Dunham and Alpert, 2004; Fagan and Davies, 2000), is a police officer's initial decision to suspect that someone is involved in illegal behavior. This is an important and neglected area of research, and one that we address in this study by examining and explaining the factors that influence this crucial stage in an officer's decision making process.

The majority of police-citizen encounters occur in the absence of any outside supervision, and police officers therefore have a great deal of discretion throughout the decision making processes (Walker, 1993). Fortunately, the substantive body of research on policing has produced information on the social processes through which the police exercise discretion in applying the law (see, for example, Black, 1976; Smith, 1984; Worden, 1989; Klinger, 1994; Mastrofski, Snipes, Parks and Maxwell, 2000). Most of the literature on police discretion is focused on the decision to stop, search, or arrest a suspect. It is important, however, to step back and examine what preceeds those decisions. Prior investigations on police discretion indicate that a combination of preexisting attitudes, and the personality that a police officer develops through experiences on the job, partly explains how officers respond in interactions with citizens (Alpert and Dunham, 2004; McNamara, 1967; Skolnick, 1977; Gardiner, 1969). Research findings, however, note that personal attitudes only partly explain police behavior. In fact, empirical research indicates that police decision making is primarily driven by situational factors related to criminal behavior (for example, seriousness of offense, victim requests) and the administrative decision making model under which the officer
works (Worden, 1989). A police officer’s discretion to choose a course of action, such as to stop a citizen, typically begins when an officer observes a person appearing suspicious or violating the law.

This study systematically observes the processes through which police officers form suspicion and make investigative stops of citizens. Suspicion is measured by an officer’s interest in a citizen or vehicle, while a stop is measured by an officer’s formal action of stopping a citizen or vehicle. This investigation, therefore, speaks to the social aspects of police officer decision making prior to the application of formal social control. First, we briefly review the relevant research, then discuss the theoretical and legal bases involved in forming suspicion and then describe our methods and findings. Finally, we present the implications of these findings.

REVIEW OF LITERATURE

Because there is no empirical research directly assessing the formation of police suspicion, we present a brief review of the research findings that explain the behavior of police officers when they interact with citizens (see Riksheim and Chermak, 1993; Worden and Sheppard, 1996; Mastrofski et al., 2000). Our discussion includes a review of the literature on the influence of organizational, legal, individual-level and environmental variables on police officer decision making in encounters with citizens.

ORGANIZATIONAL AND LEGAL FACTORS

Wilson’s pioneering work on police behavior suggests that the type of agency where an officer works influences how he or she makes judgments before making the decision to invoke legal authority (1968:38). More recent research has reaffirmed his findings indicating that the bureaucratic characteristics of the police organization play a role in explaining officer behavior, and further, that variations in department management styles and culture explain a significant amount of the variation in the willingness of officers to exercise their decision to arrest suspects (Smith, 1984; Mastrofski, 1981). For example, if an agency emphasizes a service function, then its officers are less likely to arrest offenders for low-level crimes than officers in a legalistic-style agency. Mastrofski’s study on the influence of formal and informal organizational characteristics regarding discretionary arrests in cases of drinking and driving found that, in larger departments, officers were more likely to base their decisions on informal departmental culture, whereas, in smaller departments officers were more likely to follow written departmental policy (Mastrofski, Ritti and Hoffmaster, 1987). Smith’s (1984) analysis of observational data, on more than 1,000 police-citizen encounters in several different police agencies, found that officers working in agencies characterized by a high degree of
legalistic criteria were more likely to arrest citizens compared to officers in other types of departments.

These and other studies on police decision making provide important information on the determinants of police officer behavior and tend to focus on the decision to apply formal aspects of legal control (for example, Smith, 1986). Some studies, however, indicate that departmental policies and organizational characteristics have only a minimal effect on officer behavior (Worden, 1990). First, it should be pointed out that minimal effects are still important, especially to the individuals being mistreated. However, a more important point is that racial profiling at the organizational level, through police deployment practices, can lead to discriminatory policing without individual-level discrimination. In his classic discussion of the ecological distribution of police work, Bittner (1996, originally published in 1967) pointed out that the deployment of personnel could be based on prejudices and perceptions about the relationship between race and crime. A systematic review of the literature indicates that in addition to the influences of the police organization, legal factors related to the seriousness of the alleged offense, and the strength of evidence as perceived by the officer, are the most important factors associated with a police officer’s actions and the decision to invoke legal authority (National Research Council, 2003).

INDIVIDUAL AND ENVIRONMENTAL FACTORS

In contrast to the explanatory importance of organizational and legally relevant variables, extralegal factors, including environmental and individual variables, are clearly less important. These variables, including the area in which an encounter takes place, as well as the social class, race, age, gender, sobriety, physical size and demeanor of the suspect, by themselves play only a minor role in a police officer’s decision to invoke the use of formal, legal control (National Research Council, 2003; Walker and Katz, 2002; Gottfredson and Hindelng, 1979; Lanza-Kaduce and Greenleaf, 1994; Mastrofski, Snipes and Supina, 1996; Riksheim and Chermak, 1993; Sherman, 1978). It is nonetheless important to understand the potential importance of their influence.

Research conducted more than 30 years ago suggests that an officer’s experience is related to his or her conclusions as to how suspicious and prone to crime a suspect might be, as well as to a suspect’s moral character (Werthman and Pilavin, 1967). Recently, research has shown that younger officers are more likely to be aggressive than older officers. At the same time, younger suspects are likely to show less respect and act more aggressively toward officers than older suspects, leading to a greater
likelihood that officers will take official action (Reisig et al., 2004; Alpert and Dunham, 2004).

Race is perhaps the most important individual-level factor in police-citizen interactions (Sun and Payne, 2004; Weitzer and Tuch, 2002; Barlow and Barlow, 2000; Kennedy, 1997). As Rawls (2000) notes, there are divergent underlying expectations between racial groups, even in such simple behavioral tasks as conversation. These different behaviors can be interpreted improperly and can affect the likelihood that a police officer will arrest a suspect. How a police officer interprets a suspect’s nonverbal behavior can be even more problematic. European social psychologists have looked at the influence of race on the interpretation of nonverbal communication in police-citizen encounters, and have identified specific behaviors that officers often misinterpret. Aldert Vrij and his colleagues (see Vrij and Taylor, 2003, Vrij, 1994a, 1994b, and Winkel, Koppelaar and Vrij, 1988) have concluded that there are black and white styles of nonverbal communication in police-citizen encounters. They report that in police-citizen encounters black suspects are more likely than white suspects to appear “fidgety and lively,” to use a greater range of voice, to raise their pitch more frequently and to avoid looking directly at the officer (Vrij and Winkel, 1992: 1546–1547). They conclude that “negative treatment of blacks may thus be a consequence of nonverbal communication errors, that is, faulty interpretations of characteristically black nonverbal behavior” (Vrij and Winkel, 1992: 1547).

For example, a young black male who does not look in the eyes of an officer, or appears nervous when he is being questioned, may appear suspicious, while in reality, the youth avoids eye contact in an attempt to not be disrespectful, and is nervous just to be talking with an officer. In addition, the officer may not react the same way, or with the same level of suspicion, to similar behavior of a white youth. Over time, this type of response can develop into a formal stereotype. As Kennedy (1997) informs us, race is often used as a proxy for an increased risk of danger, criminality and victimization.

RESEARCH ON RACE, ARREST AND COMMUNITY

Observational research indicates that the positive association between minority status and the probability of arrest is attributable to a larger proportion of blacks residing in lower-status communities (Smith, 1984). Obviously, police deployment decisions can account for much of this relationship. The perception of high crime rates in certain communities leads to greater police deployment, which yields higher arrest rates, which, in turn, are interpreted as evidence of a higher crime rate. However, this research also indicates that police officers are more likely to arrest
suspects when whites have been the victims of crime than when blacks have been the victims, an outcome suggesting that racial bias is generated by a concern for the legal protection of white victims. Subsequent research (Smith, 1986), analyzed police-citizen encounters in sixty neighborhoods and found that variations in police use of its legal authority in specific neighborhoods is linked to the racial composition of those neighborhoods (confirming Blalock's 1967 racial threat theory) and not simply to the race of the individuals confronted (see Stolzenberg, D'Alessio and Eitle, 2004).

For example, the importance of minority status is heightened when a member of a minority group travels through a largely segregated and white community or location. This may explain why police behavior can be linked to neighborhood composition but not to an individual's race or ethnicity. Smith (1986) found that people in lower-class black neighborhoods were more likely to be arrested than suspects in more affluent neighborhoods. However, it is interesting to note that the police were less likely to stop suspicious persons in high-crime neighborhoods.

Taken together, the research on race and police behavior indicates that minority status must be considered when evaluating police-citizen interactions. Additionally, the characteristics of the area in which the interaction occurs play an important role, which suggests that there may be a "threshold effect" where police only stop, search or arrest individuals in high crime areas when the level of the offense rises to a level of seriousness they cannot ignore. In such circumstances the police ultimately provide fewer and poorer services in low-income and nonwhite neighborhoods, a phenomenon that Barlow and Barlow (2000) call "under policing." Underpolicing may occur because the police undervalue the people or property in the area and are less motivated to protect them, but may do so because the citizens in these areas lack the power to force the police to provide the appropriate levels of service (Anderson, 1999). In general, however, research has provided mixed results concerning the influence of race on police discretion. It also shows mixed results on the influence of a suspect's race on a police officer's response, and on the influence of an officer's race on a suspect's reaction. For example, some studies indicate that black suspects are more likely than white suspects to be arrested and/or to be treated more harshly by the police (Powell, 1990; Smith and Visher, 1981; Smith and Davidson, 1984), while other studies report that a suspect's race has no individual-level effect (Klinger, 1996; Smith, 1986). Research is also mixed on the importance of race on the use of deadly force (Geller and Karales, 1981; Blumberg, 1981; Fyfe, 1980) and the use of nondeadly force (Dunham and Alpert, 2004; Alpert and Dunham, 2004). After an exhaustive review of the literature, the National Research Council (2003: 3) concluded that there is a strong empirical basis for asserting the importance of legal variables, but that "more research is
neeed on the complex interplay of race, ethnicity and other social factors, in police-citizen interactions.” Despite the lack of definitive conclusions regarding the importance of race in police decision making, race and police work are inextricably tied to one another and often form the basis for problematic police-citizen relationships in many communities.

THEORETICAL AND LEGAL BASIS OF SUSPICION

Although race is not a legitimate justification for an officer to take a formal action against an individual, both real-world experiences and theoretical reasons suggest that race is an important factor for police officers in forming suspicions (Kennedy, 1997). Historically, the police have used race as a reason to stop, search and arrest suspects (Fridell, Lunev, Diamond and Kubu, 2001; Harris, 1999; Walker, Spohn and DeLone, 2000). Sociologically based theories, such as racial threat theory, critical race theory or conflict theory, suggest that the police specifically target minorities as an instrument of the political establishment to suppress the potential threat minorities pose on the hegemony of the white elite (Chambliss and Seidman, 1982). Blalock’s (1967) theory of minority group relations suggests that as the relative size of the minority group increases, members of the majority group perceive a growing threat to their positions and will take steps to reduce the competition. The “state” will increasingly perceive blacks as a threat to whites’ political power, and respond by intensifying the level of social control to maintain the dominant position of whites. Research indicates that the presence of minorities is associated with greater police expenditures (see Kane, 2003 for a review), however, there is insufficient research at the individual-level to suggest that the police specifically target minorities as a method of political control.

In addition to sociological explanations for the importance of race in police decision making, there are also psychological explanations for how race interplays in police-citizen interactions. Cognitive theorists, for example, acknowledge that learning is influenced by observations, and that the relative power of that learning varies according to the degree of familiarity, and repeated number of associations (see Good and Brophy, 1990). Research provides evidence that these schema form a mental representation (model) that plays a key role in predicting a person’s responses to others, places and things, in future encounters or events (Grosset and Barrouillet, 2003; Brehm, Kassin and Fein, 2002; Bower, Black and Turner, 1979; Read, 1987; Craik, 1943). Once a mental model is formed, persons or places that have familiar characteristics or properties activate these cognitive schemas. In other words, police officers learn to respond to people, places and situations based on their experiences, including how they were trained and taught in the police academy, by field
training officers, supervisors and others. In fact, these influences, among others, may and often do include racially prejudiced attitudes. It is therefore important to acknowledge that behaviors based on police experience suffer from the same misinformation and prejudices as the behavior of other citizens.

Training and experience provide the basis for the mental model of police officers and the cues or schema that trigger suspicion (Rubinstein, 1973). Police officers are taught to look for nonverbal indicators of deception in forming suspicion of criminal activities. Many of these are culturally normative for blacks, such as avoiding eye contact, speaking at a faster rate, and arm and hand movement (Vrij and Winkel, 1992). Not surprisingly, studies find that white police officers are more likely to form suspicion with regard to the nonverbal communication characteristics of blacks compared to whites (Vrij and Winkel, 1992; Winkel, Koppelaar and Vrij, 1998). Further, experience is the basis by which people form mental models of suspicion. Police officers may be more likely to form cognitive schemas of blacks as suspicious because of their experiences with criminals. For example, research from both arrest data and victim accounts indicates that black males are overrepresented in offending rates for personal crimes (rape, robbery, assault and personal larceny) (D’Alessio and Stolzenberg, 2003; Hindelang, 1981). Police officers are also more likely to be deployed in high-crime minority neighborhoods (Kane, 2003). As a result of the disproportionate number of offending of black males with respect to certain types of crimes, and deployment practices which lead to disproportionate scrutiny and arrest of some groups, officers develop a history of arresting black males and may learn to assume that blacks are likely to be criminally suspect. Obviously, this line of reasoning controverts the “underpolicing” phenomenon.

Once a police officer identifies an individual or a group by association with an assumed role (for example, seeing black males as automatically criminally suspect), the stage is set for interpreting future actions—in other words, the officer has formed a mental model of the individual or group. These mental models are impressionistic and are based on perceptions that may or may not reflect the reality of a given situation. Additionally, such schema may or may not be legally justifiable, but are understandable and predictable in “real world” police-citizen interactions. The cognitive schema of police officers may therefore result in a higher percentage of innocent citizens being viewed suspiciously, and consequently, being stopped and questioned, because they are minorities rather than because they are behaving in a suspicious manner. This pattern could explain the disparate experiences of blacks and whites with respect to being stopped and questioned by the police (Lundman and Kaufman, 2003).
Police officers are trained to identify suspicious and threatening people, and to develop their own cues of suspicious behavior based on their individual experience. Research indicates that police officers are more likely than citizens to apply a "cognitive schema" that interprets unfamiliar actions or actions of uncertain intent as suspicious (Ruby and Bringham, 1996). Police officers are also more likely than citizens to become suspicious about people or actions they do not believe fit the environment or situation (for example, a car idling in front of bank). Once an officer has developed these cues for suspicion, he or she may act on them in a given situation and approach or confront a citizen. A well-trained officer can look at a scene and determine what looks correct and what "doesn't fit" (Miller, 2000). For example, vehicles that appear "normal" in one setting may appear out of place in others. New expensive vehicles in known drug dealing areas may appear suspicious, whereas rundown cars in affluent residential neighborhoods may attract attention. In both of these examples there are logical reasons for suspicion, just as there may be reasonable explanations that negate the suspicion. While in many circumstances these cues are reasonable, they are often tied to issues of race and social status. It is important to recognize that these cognitive schemas provide a theoretical basis for understanding how particular individual and environmental cues are tied to issues of race in America. Clearly, the suspicion developed from a cognitive schema is a supposition and not necessarily tied to the actual behaviors or actions of minority citizens.

In an ideal world, the formation of suspicion and any resulting police action should be aroused by the actual behavior of suspects. However, The Supreme Court ruled in the 1968 case of Terry v. Ohio (392 U.S. 1) that police officers have the constitutional right to stop and search an individual based on "specific reasonable inferences he is entitled to draw from the facts in light of his experience" (27). The Court explained that police officers can legitimately form suspicion based on information collected during their observation or through their investigation of a suspect. To justify intrusive action (for example, stopping and searching a suspect) a police officer must be able to articulate her or his suspicion of a specific crime. The Court acknowledged three primary sources that police officers rely on in determining whether an action is suspicious: information received about a suspect from other sources; information gleaned about a suspect through observation (appearance and behavior); and, the time and place of the suspect's actions. To justify intervention, a police officer can evaluate the incongruity between observed and expected patterns of behavior using her or his knowledge of "normal" behavior patterns for a given time and place. He or she must be able to determine whether a person's observed behavior is "normal" and appropriate for the given
situation and conditions, or if it is suspicious and therefore justifies a continued probe or formal intervention. An officer giving more than a passing glance at a person or situation is referred to in some police cultures as someone “putting the antenna up.”

While a particular behavior may be reasonable and acceptable in some situations (congruent), it may be out of place (incongruent) in another environment or situation. The mere fact that a young white citizen is driving around a predominately black neighborhood suggests nothing improper per se, but if the area is known for drug sales and the youth acts nervously in front of the police, an officer’s suspicions may understandably be aroused and justify him or her stopping and questioning the youth. While the Supreme Court acknowledged this as proper police procedure, critics have argued that the court decision allows officers to use race improperly and to the detriment of minority citizens (Romero, 2002; Delgado and Stephanie, 2001). It is important that neither the court nor social science research has fully explored or evaluated the process and criteria the police use in forming suspicion.

THE STUDY

Theoretically, police suspicion should be based on prior knowledge, observation, and the time and place of an incident. While legal decisions and prior research direct our attention to these categories, it is important to gain as much insight as possible from the observations of the police officers actually forming suspicion. This would permit an assessment of the relative importance of the various factors that lead to police suspicion and the invoking official action. By design, this study is limited to discretionary police actions, because of the difficulties involved in collecting data on the people, behavior and events that did not arouse police suspicion. Due to the unlimited possibilities of such individuals and events, it would be extremely difficult, if not impossible, to collect data, though such information would allow calculations on actual racial disparities. Without it, however, we are unable to assess actual racial disparities as to whether officers were more likely to become suspicious of minority citizens than others. The focus of this research is on minority status as a factor in officers forming nonbehavioral as opposed to behavioral suspicion, and deciding to make an actual stop. We are interested, as previous studies have not been, in the formation and creation of types of cognitive suspicion as well as the formal actions undertaken by the police (for example, stops).

1. We do have self-reported information from officers on the reasons they became suspicious of certain citizens. See Dunham et al., 2005.
This study systematically observes police officers to examine how important race and other situational and individual-level factors are in forming suspicions and deciding to stop citizens. Where prior literature is inconclusive concerning the role of race in official actions taken by the police, we hypothesize that race plays an important role in the informal mechanisms that lead police officers to form nonbehavioral suspicion. The sociological theories of racial threat and psychological theories of cognitive schema both suggest that race will play an important role in whom the police view suspiciously for nonbehavioral reasons. Legally, officers are required to observe behavior that presents reasonable cause for action. However, research on racial profiling suggests that race has some significance in stops of suspicious persons, regardless of any related traffic violation (see Gibbons, 2004; Gross and Barnes, 2002; Novak, 2004). Therefore, we hypothesize that race will play a role in whom the police stop. To test these hypotheses, we use the following set of variables recorded from systematic observations of officers working in the field during the time they formed suspicions and made stops.

DATA AND METHODS

Our methodology integrates quantitative and qualitative data collection techniques to provide an in-depth understanding of the police decision making process. The qualitative data were collected to enhance the quantitative information, using the general principles of protocol analysis (see Ericsson and Simon, 1984; Worden and Brandl, 1990). Cromwell, Olson and Avary (1991) used a similar method, labeled “Staged Activity Analysis,” to assess the decision making processes burglars used. As Worden and Brandl (1990) argue, this procedure can be used to improve the quality of police research.

This study includes an examination of police officers in Savannah, Georgia, who were observed and debriefed after incidents when they formed suspicion either about an individual or a vehicle. According to the 2000 census, the City of Savannah has 131,510 residents: 57 percent are African American, 39 percent are white, 1.5 percent are Asian and 1.5 percent are categorized as other. At the time of the research, the Savannah Police Department (SPD) had approximately 400 sworn officers, with the majority assigned to the Patrol Bureau, which consisted of 31.8 percent black males, 6.4 percent black females, 51.2 percent white males, 4.8 percent white females, 4.8 percent other males and 0.4 percent other females. Officers were assigned by area, meaning that some areas had a larger distribution of minority officers than others. The distribution of sworn officers in patrol closely matched the percentage of officers observed in the study. Shortly after the data collection phase of the study concluded, the Savannah police department merged with Chatham
County's to form the Savannah Chatham Metropolitan Police Department.

During the months of April through November 2002, trained observers accompanied randomly selected officers on 132 8-hour shifts, during which time they observed officers forming suspicion 174 times. The observers accompanied officers in each of the four precincts and on all three shifts. Observers were assigned to a precinct and a shift and then randomly assigned to an officer. This allowed for complete coverage of the City of Savannah. A formal instrument was developed to capture what officers were thinking and feeling when they made decisions and/or took action. Data we're not collected during the initial ride along so that observers could build rapport with officers and train them to discuss their suspicions. After the initial introductory rides, observers averaged 3.25 ride-along tours with the same officer. The observers were trained to document the police officer's actions and reactions as well as any interactions that occurred with citizens (see Mastrofski et al., 1998). Observers were trained to document what they witnessed and to record the sequence in which the events unfolded. To document when an officer became "suspicious," officers were asked to think out loud when something or someone raised their suspicion. Also, observers were trained to make note of times when officers seemed to take notice of something, and whether they acted on it, and to question the officer about his or her thoughts and feelings about the observation. The observer could thus remind and prompt officers to "think out loud" so they, the observers, could identify when an officer became at all suspicious about a person or a vehicle. For example, if the observer noticed an officer do a "double-take," the observer would bring that to the officer's attention after the event and ask what he or she was thinking and feeling at the time. The observer would ask what caught the officer's eye and what prompted the officer to either continue his or her routine activities or take action.

"Forming suspicion" occurred any time an officer became doubtful, distrustful or otherwise troubled or concerned about an individual. Only proactive encounters were included in the study; that is, the observations did not involve cases in which officers were responding to calls for service or other calls from dispatch. In most of the cases, it was the behavior of the suspect(s) that concerned the officer. This concern or unease did not always result in an individual or vehicle stop. In some cases, officers realized that their initial suspicion was unwarranted and continued to go about their routine activities.

To examine the effects of minority status on an officer's decision making with regard to suspicion, we investigated the role of officer and suspect race and other demographic variables, the characteristics of an area and the mode of transportation. For example, an officer's view of a
suspicious, we assess whether the officer’s race, level of education and tenure on the police force affected the way they formed suspicion. Additionally, we assess the relationship between the type of suspicion, the suspect’s race, the racial makeup of the neighborhood, the perception of the neighborhood’s level of dangerousness, the type of action in which a suspect was engaged, and the mode of transportation. Drawing on the literature on police behavior, we developed a set of independent variables that measured the individual attributes of officers and suspects as well as the demographic characteristics of the area being policed.

DEPENDENT VARIABLES

The focus of our study is on the type of suspicion formed by the police and any resulting action the police take. There were a total of 174 incidents in which police officers were observed forming a suspicion. For the purposes of this analysis we were interested in examining the influence of race and other predictor variables on the type of suspicion a police officer formed, and, additionally, whether the suspicion formed ultimately resulted in a stop. Consequently, we divided suspicion into behavioral and nonbehavioral categories. Behavioral criteria included specific actions by citizens that were either illegal or interpreted by the officer as suspicious. One example is observing a traffic offense. Obviously, not all police officers stop all traffic violators, but an observed traffic violation justifies an officer making a stop.

Nonbehavioral criteria included officer concern about an individual’s appearance, the time and place, and descriptive information provided to an officer. Suspicions based on nonbehavioral criteria do not necessarily provide a clear justification for a stop. Suspicions initiated by BOLO (be on the look out) information were included in the nonbehavioral category for several reasons. While BOLO cases may be based on behaviors previously undertaken by suspected criminals, the description provided to officers is based on appearance and not behavior. It is important to bear in mind that many BOLO descriptions are vague and can apply to any number of individuals in a community or within a demographic group (for example, “be on the look out for a young black male wearing a red jacket and blue jeans”). BOLO descriptions may still justify suspicion in some cases, but they are typically not behaviorally based. In addition, the point of this study was to investigate factors related to the formation of behavioral and nonbehavioral suspicion for the individual officers being observed. As a result, our model cannot speak to events that preclude systematic social observation. For example, research suggests that officers acquire visual cues for suspicion based on experience and training and also that experience and training may also be behaviorally based. Based on
past behavior they have witnessed, an officer may form a cue that individuals who wear specific clothing or spend a lot of time in a specific area are more inclined to be criminal. However, during the current formation of suspicion, the police officers were relying on nonbehavioral identifiers (clothing, race, location, for example). Therefore, stops based on nonbehavioral criteria are especially interesting and are in need of elucidation. Nonbehavioral suspicions were coded to equal 1 and behavioral suspicions were coded to equal 0. Stops of citizens were coded to equal 1 if the citizen was stopped and 0 for all other outcomes. As the dependent variables in this study are dichotomous we model the process using logistic regression.

INDEPENDENT VARIABLES

As noted, the literature suggests that demographic characteristics of police officers and citizens are important factors in the police decision making process (National Research Council, 2003). We therefore included measures of race, level of education, and number of years in-service for each observed officer. The race of the officer was dummy-coded to equal 1 if the officer was white. An officer's education was coded into the dummy variable with 1 equaling some level of college education (for example, associates, bachelors, or masters degree); we chose to do this because prior research suggests that education plays some role in police officer behavior (Sherman, 1978; National Research Council, 2003; Walker and Katz, 2002). The number of years an officer had worked for the police department was included as a continuous variable. Research also suggests that the racial characteristics of suspects and the racial composition of an area the police are patrolling are important ingredients in an officer's decision making process (Smith, 1986). We therefore included a dummy measure of the race of the suspect that equals 1 if the suspect were black. In terms of neighborhood composition, we included a dummy variable that equals 1 if the neighborhood were perceived by the officer as predominately black and 0 if this was not the case. These neighborhood racial categories were based on police officer perceptions of the area being patrolled. We also included a measure of each officer's individual perception of the neighborhood, which indicated whether the area appeared to be "troubled." We included this

2. To respond to concerns about using this category in our analysis, we reestimated the model eliminating the cases that involved suspicions for individuals or vehicles matching characteristics of suspects that officers were informed to BOLO ("be on the look out"). The results from the suspicion model dropping BOLO cases remained substantively the same, although the racial effect for minority suspects is reduced to being significant in only a one-tailed test (two-tailed p value = .08). Still, our small sample size (n=174) justifies employing a more liberal significance level than .05.
measure because prior research suggests that the police patrol differently in areas that they view as having a high crime rate (Klinger, 1997). Troubled neighborhoods were coded to equal 1 and 0 otherwise. Because the mode of transportation may influence whether an officer can see suspects and/or form a suspicion, we included a dummy variable coded to equal 1 if the suspect was driving an automobile.

Finally, there may be some concern that suspicions that result in traffic tickets are different from other suspicions because they are strictly behaviorally based. This is, however, not always the case. First, there are situations when an officer becomes suspicious of a person/vehicle because of nonbehavioral criteria and only witnesses a traffic infraction because of the continued observation. Indeed, some police officers have concluded that if you follow just about anyone for a time, you will observe a traffic infraction. In this case, the suspicion would be nonbehavioral while the stop would be behavioral. Second, it is common for police officers not to respond to every traffic infraction they observe. To do so would monopolize their time. Therefore, there is a subjective nature to selecting which traffic infractions they choose to ignore or respond to. Our criteria for nonbehavioral suspicion often provide the basis for these decisions. We thus concluded that suspicions that result in traffic tickets will have a range of behavioral and nonbehavioral reasons for suspicion, similar to other types of stops. However, to allow us to assess any statistical differences between stops resulting in traffic tickets and other stops, we included a measure of whether the suspect committed a traffic offense. Cases involving traffic offenses were dummy-coded to equal 1.

RESULTS

Table 1 includes the descriptive statistics for the dependent and explanatory variables of the sample of police suspicions. Thirty-four percent (N=59) of the observations involved a nonbehavioral suspicion. Fifty-nine percent (N=103) of the suspicions recorded involved stopping the suspect. Fifty-six percent of officers were white. Approximately 29 percent of the officers earned at least an Associate’s degree. On average, police officers have 4.2 years of experience on the force. In approximately 41 percent of the cases, the officers indicated that the area was “troubled.” Of all suspects, 71 percent were black and 70 percent were driving a car. In 47 percent (N=82) of suspicions, the suspect committed a traffic offense and 57 percent were formed in predominately black neighborhoods. Two

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3. A separate analysis was conducted for both suspicions and stops removing traffic offenses. The findings remain substantively the same and indicate that black citizens are more likely to be viewed suspiciously for nonbehavioral reasons and that black citizens are not more likely to be stopped.
logistic regression models were estimated to examine the sequential relationship between the explanatory variables, nonbehavioral suspicions, and stops. Results from the logistic regression model predicting nonbehavioral suspicion are presented first, followed by the results from the logistic regression model of citizen stops.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonbehavioral suspicion</td>
<td>.339</td>
<td>.474</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Stops of citizens</td>
<td>.591</td>
<td>.492</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Traffic offense</td>
<td>.471</td>
<td>.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Black citizen</td>
<td>.709</td>
<td>.455</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White officer</td>
<td>.563</td>
<td>.497</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>College degree (officer)</td>
<td>.298</td>
<td>.459</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Suspect in car</td>
<td>.70</td>
<td>.459</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Troubled neighborhood</td>
<td>.405</td>
<td>.492</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Black neighborhood</td>
<td>.567</td>
<td>.496</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Officer's years in service</td>
<td>4.224</td>
<td>4.233</td>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 2 presents the results from the logistic regression model predicting nonbehavioral suspicion. The results indicate that suspect and officer demographic variables did not play an important role in forming nonbehavioral suspicion, with the exception of the suspect's race. Officers were significantly more likely to form a nonbehavioral suspicion when the suspect is black (b=1.49; p<.05), the odds being more than four times (4.4) greater if the suspect were black. There was no relationship between the race of an officer and the likelihood of forming a nonbehavioral suspicion. These results are consistent with other studies on police behavior, indicating that the suspect's race is more important than the officer's (National Research Council, 2003, Walker and Katz, 2002). In this analysis, however, we are examining the thought processes of police officers prior to their engaging in any actual "behavior." The results are consistent with our predictions that minority status would be an important predictor of the type of suspicion raised by officers. In this context, the findings suggest that officers are more likely to view minority suspects suspiciously because of their appearance or other nonbehavioral factors. Also, the longer the officers had been on the police force, the more likely they were to form nonbehavioral suspicions (b=.100; p<.10). This finding is

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4. Due to the fact that the sample size of this study was relatively low (N=174) we did not attempt to control for repeated observations with the same officer using HLM modeling.
not significant at the .05 level, but is close enough to be noteworthy given our small sample size. These findings may indicate that as an officer gains experience he or she forms certain cues or “cognitive schemas” wherein people appear suspicious for reasons that are not behavioral. Due to the significance level of this finding, further research is needed to justify confidence in it. If a suspect were in a car, it was more likely that a police officer would form a nonbehavioral suspicion (b=-2.08; p<.05). That is, when a citizen is in a car, officers were eight times more likely to form a nonbehavioral suspicion. These findings suggest that automobiles may have certain appearances that generate nonbehavioral suspicions. Further, if a suspect were observed committing a traffic offense (behavior), then the initial suspicion was significantly less likely to be formed for nonbehavioral reasons (b=-5.40; p<.05). The racial composition of the neighborhood and the perception of it being troubled had no influence on the type of suspicions formed (behavioral vs. nonbehavioral). This finding differs from research on actual police behavior that suggests neighborhood composition is an important determinant of the use of legal authority (Smith, 1986). Here, however, we were examining incidents prior to any actual police action. The discrepancies between these findings and those generated by actual police behavior may also be the result of differences in the measurement of neighborhood characteristics. In general the findings from this analysis suggest that minority status plays an important role in explaining the types of suspicion that police officers form, and that blacks are more likely than whites to be viewed suspiciously for nonbehavioral reasons, when compared to behavioral reasons.

Table 2. Predictors of Nonbehavioral Suspicions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio</th>
<th>z value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic offense</td>
<td>.004</td>
<td>-5.627</td>
<td>.0004 - .004</td>
</tr>
<tr>
<td>Black citizen</td>
<td>4.447</td>
<td>2.134</td>
<td>1.129 - 17.516</td>
</tr>
<tr>
<td>White officer</td>
<td>.418</td>
<td>-1.457</td>
<td>.129 - 1.351</td>
</tr>
<tr>
<td>College degree (officer)</td>
<td>1.992</td>
<td>1.138</td>
<td>.607 - 6.529</td>
</tr>
<tr>
<td>Suspect in car</td>
<td>8.073</td>
<td>2.999</td>
<td>2.061 - 31.613</td>
</tr>
<tr>
<td>Troubled neighborhood</td>
<td>1.090</td>
<td>.141</td>
<td>.324 - 3.664</td>
</tr>
<tr>
<td>Black neighborhood</td>
<td>.711</td>
<td>-.543</td>
<td>.208 - 2.427</td>
</tr>
<tr>
<td>Officer’s years in service</td>
<td>1.112</td>
<td>1.670</td>
<td>.981 - 1.261</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.487</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05 (two-tailed)

To provide an additional interpretation of the results we calculated a series of predicted probabilities for the average case. For the average case, the probability of nonbehavioral suspicion was .18. If a suspect were black and an officer were white then the probability of a nonbehavioral
suspicion was .19. If both a suspect and an officer were black the probability of a nonbehavioral suspicion increased to .36. The probability of a nonbehavioral suspicion was only .05 if the officer and suspect were both white. These findings clearly illustrate that nonbehavioral suspicions are most common when a suspect and an officer are both black, and least common when both officer and suspect are white.

Next, we turn our attention to the actual behavior of police officers once they have formed a suspicion. Specifically, we examine the same set of predictor variables with regard to officers stopping and questioning suspects. The results from this model of stop behavior are displayed in Table 3. In contrast to the results for forming nonbehavioral suspicion, a suspect’s race did not play a role in explaining stops of suspicious persons by the police. In fact, the only variable that significantly predicted stopping suspicious persons was the commission of a traffic offense (b=2.35; p<.05), a behavior that can always justify a stop. Predictably, the risk of being stopped was more than ten times (10.5) as likely if a suspect committed a traffic offense. These findings suggest that race plays a minimal role in the actions of officers once a suspicion has been formed. Interestingly, we find no evidence that black suspects are more likely to be stopped and questioned by the police once they have been identified as a suspicious person. As with previous research on police behavior (see for example, Smith, 1984) these results may indicate that there is an informed threshold for making a stop. In other words, officers must actually see a violation of the law occur before stopping and questioning a suspect, even if they already think the person appears suspicious.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio</th>
<th>z value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black citizen</td>
<td>.919</td>
<td>-1.87</td>
<td>.379 - 2.226</td>
</tr>
<tr>
<td>White officer</td>
<td>1.269</td>
<td>.544</td>
<td>.537 - 2.995</td>
</tr>
<tr>
<td>College degree (officer)</td>
<td>.692</td>
<td>-.804</td>
<td>.282 - 1.696</td>
</tr>
<tr>
<td>Suspect in car</td>
<td>.503</td>
<td>-1.324</td>
<td>.182 - 1.390</td>
</tr>
<tr>
<td>Troubled neighborhood</td>
<td>1.531</td>
<td>.938</td>
<td>.628 - 3.732</td>
</tr>
<tr>
<td>Black neighborhood</td>
<td>.710</td>
<td>-.761</td>
<td>.293 - 1.716</td>
</tr>
<tr>
<td>Officer’s years in service</td>
<td>1.023</td>
<td>0.459</td>
<td>.925 - 1.133</td>
</tr>
</tbody>
</table>

* p < .05 (two-tailed)

To provide an additional interpretation of the effect of a traffic offense on the likelihood of being stopped and questioned, we calculated predicted probabilities for the average case. The results indicate that the probability of being stopped was .87 if the suspect committed a traffic offense.
offense, and only .39 if not, holding all other variables constant at their mean value. These findings clearly illustrate that the factors that lead to forming a nonbehavioral suspicion are different from those that lead police officers to stop suspicious persons. In fact, it appears that officers often form nonbehavioral suspicions of individuals for reasons that do not result in stopping and questioning them.

The findings from the two sets of analyses suggest that race plays a role in the type of suspicion police officers form, but that it has little impact on actions taken by police officers (see Gould and Mastrofski, 2004: 341). These results, however, give us little contextual understanding of the actual mechanisms that lead to the formation of nonbehavioral suspicion and the decision to stop an individual. In an attempt to provide some contextual understanding we apply the results from the logistic regression models that predicted nonbehavioral suspicions and stop decisions on cases with high-ranked probabilities of each event occurring. First, we examine the narrative description of the criteria for an officer’s formation of nonbehavioral suspicion for incidents where the predicted probability from the logistic regression model ranked in the ninetieth percentile or above, or in cases where there was a 90 percent or greater chance that the officer formed a nonbehavioral suspicion. There were thirteen cases that met this criterion. The narrative descriptions of the reasons that caused officers to form suspicions in these cases are informative. For example, in one case the officer formed suspicion because the suspect was driving a motor vehicle that matched the description of a “G-ride” (ghetto ride), a type of car with heavily tinted windows, custom rims, or flashy paint job. Four of the thirteen cases involved vehicles that matched a BOLO (“be on the lookout”) call. One involved a suspect who was in the vicinity of a robbery and shooting that had recently taken place. Two involved suspects who appeared to be out of place to the officers when they pulled up next to their cars. One involved a woman observed in the shadows of an area known for prostitution. The narrative descriptions of each of these indicate that the probability of nonbehavioral suspicion was greatly influenced by a number of factors, such as officers having prior information on a suspect or on criminal activity in a specific area, or where civilians appeared to be nervous when the police approached. It is worth

5. We based our decision for using the ninetieth percentile on the following two criteria. First, for policy purposes we saw the ninetieth percentile and above as the exceptional cases that need to be investigated. Second, dropping the narrative assessment below the ninetieth percentile would result in including cases which are not exceptionally predictive in the model and would diminish the capacity of their narrative assessments to explain the empirical findings. In other words, we chose the ninetieth percentile as a contextual method for examining the empirical relationships revealed in our model.
noting here, however, that none of these cases involved actual behaviors that one could say were suspicious or illegal.

Next, we select cases that met the criteria for having at least a 90 percent chance of being stopped by the police, as indicated by the logistic regression model. There were a total of ten cases that met this criterion. The narrative descriptions of these cases show that "traffic offenses" were the predominant reason for stops. Eight of the ten cases involved stops based on traffic offenses. There were two exceptions: a case in which a citizen who matched a description of a robbery suspect was stopped and another in which a citizen was "hanging around a locked trailer in a parking lot." Three cases involved individuals stopped for speeding. The other cases involved running red lights, stop signs, and expired or altered vehicle tags. The narrative descriptions of these cases indicate that the probability of stopping a citizen was greatly influenced by officers having observed citizens committing traffic related offenses. These narratives offer further evidence that the rationale for forming nonbehavioral suspicion differs from the reasons for deciding to stop citizens.

CONCLUSIONS

These results support the argument that race is an important factor in the type of suspicion—behavioral versus nonbehavioral—the police form, but is not predictive of official police action. What these data do not tell us, however, is the extent to which suspicions are warranted by citizen behavior. Research suggests that official police reactions to juvenile delinquency are biased against minorities (Sampson, 1986). This study cannot address the issue because no information on nonsuspicious citizen behavior was recorded.

Nonetheless, we found that the race of a suspect significantly affected inferences the police made about suspicion, although these types of inferences did not play a significant role in their decision to stop a citizen. Consequently, this study suggests that police officers are more likely to form nonbehavioral suspicions for individuals who are members of a minority group. This finding is consistent with psychological theory of cognitive schema in suggesting that blacks are more likely to be viewed suspiciously by the police for reasons that appear innocuous. The results also suggest that the relationship between minority status and nonbehavioral suspicion appears to fit a pattern in which suspects or vehicles match descriptions that officers are supposed to be looking for. However, this does not influence the ultimate decision to stop and question suspects. Instead, it appears that police officers require a clearer prompt, such as a suspect committing a traffic offense, or matching a reported description of a suspect in a crime, before they decide to exercise
their discretion to stop a suspicious person or vehicle. The quality of an officer’s decision making process, in terms of objectivity and consistency, is beyond the scope of these observational data, however, criminologists would be naive to think that mental images of criminals inextricably linked to race in American culture (Russell-Brown, 1998) do not exist among police officers working in urban areas. At the same time, one can imagine officers that retain race-conscious views of criminality and act objectively and neutrally, stopping citizens and questioning them only for objective and tangible reasons. The results from the present study suggest such a process may operate among the observed officers. As Kennedy (1997) notes, we must distinguish between officers who use race as a guide in decision making and those officers who use race as a discriminatory tool. We must be careful to make such distinctions on reliable data and not on faulty or inappropriate information or hunches.

Throughout this study we focused on the role of race in explaining the type of police suspicion formed. However, we want to emphasize that this research does not address the question of police fairness. Additionally, because of research limitations, this study may generate more questions than it answers—a cliché, but true of most social science research. The findings from this study are important in that they provide the first empirical evidence that race is an important predictor of the type of suspicion formed by the police in actual street-level encounters with citizens. One may wonder, for example, to what extent unmeasured social cues, such as dress or place, explain the race findings. Further inquiry is needed to examine how social cues are interpreted by the police when they form suspicion and, additionally, how these social cues coincide with or differ from public perceptions of what is or is not suspicious. Getting inside the “heads” of police officers and understanding how nonbehavioral visual cues associated with being black influence what looks suspicious is an important process to study in the future. Consequently, it is important for future research to focus on this neglected, yet critical, stage in a police officer’s decision making process. While this study relied on observations of officers and their self-reported reasons for becoming suspicious, future research should create a control group of people, behavior and events that police do not find suspicious. The problem of creating a valid control group is complex, but may be overcome by employing simulated events in an experimental design. While the use of an experimental methodology would yield information on actual racial disparities, it necessarily would rely on simulated events. Whatever future methodological direction is taken to examine police officer suspicion, this study demonstrates the importance of this type of research and is a strong foundation on which future research can build.
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Roger Dunham is a professor of sociology at the University of Miami. His current research includes several projects assessing police decision making involving citizen stops and racial profiling. His recent publications include Understanding Police Use of Force: Officers, Suspects, and Reciprocity (Cambridge University Press, 2004) and Critical Issues in Policing (Waveland Press, 2005) both with Geoffrey Alpert. He has co-authored papers that have recently appeared in The American Behavioral Scientist, Police Quarterly, and Justice Research and Policy.