Police Officers' Decision Making and Discretion: Forming Suspicion and Making a Stop

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Abstract

Most police activity occurs in private, away from the public=s view. This creates a situation that allows police officers discretion in the way they think about what they see and how they handle those with whom they come in contact. There has been an effort by the research community to examine issues concerning how police act and respond in general and what police do specifically when they interact with citizens. A conspicuous void in the research effort has been the lack of attention paid to the process by which police officers form suspicion about a suspect whether or not a formal intervention such as a stop was made.

Officers in Savannah, Georgia were observed and debriefed after they became suspicious about an individual or vehicle. Observers accompanied officers on 132, 8-hour shifts, during which time, the officers formed suspicion 174 times. AForming suspicion@ occurred any time an officer became doubting, distrustful or otherwise troubled or concerned about an individual. In most of the cases, it was the behavior of the suspect(s) that concerned the officer. This concern did not always result in a stop of an individual or vehicle. In some cases, the officers realized that their initial Asuspicion@ was unsupported. In fact, 103 stops resulted from the suspicions that were formed by the officers during the times they were observed.

Several factors were significantly associated with the likelihood that an officer would make a stop based on suspicion. Interestingly, none of the characteristics of the suspect was important. In other words, officers were equally likely to stop individuals whether they were male or female, African-American or white, low or high socioeconomic status.

The encounters were assessed by the interactions between the officers and suspects. Although most encounters went smoothly, some changed character based on the actions and attitudes of one or both of the actors.

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Executive Summary

The majority of past research on police behavior has employed observational methodology to focus on actions taken by officers following contact with a citizen. This past research has largely concentrated on whether or not an arrest or other formal intervention follows a stop or other police-citizen interaction. The research at hand examines police officers' decisions before an initial contact is made. This study therefore focuses on the formation of suspicion and the decision to stop and question a citizen. Additionally, we analyze the outcomes of these stops.

It is important to note that observational studies have generally been designed to collect information on the actions and reactions of the police and citizens during an encounter, and that the common limitation of such studies lies in an assessment that focuses on the interaction process *after* the contact with a citizen has been made. While this method does produce data capable of answering many important questions about police behavior, it does not address *why* an officer selects a particular individual for a stop, thereby transforming some citizens into suspects at the expense of other citizens who are ignored. Our research, therefore, focuses on the vitally important decisions made prior to an initial police-citizen contact, answering questions about forming suspicion and making the decision to stop a citizen. These observations, read in conjunction with the outcome of these stops, provide a useful insight into how the decision to make a stop can affect police-citizen interactions.

Methodology

The present endeavor attempts to fill some of the gaps in the previous research. Our methodology integrates quantitative and qualitative data collection in an effort to improve the value of the data. Our quantitative data includes the routine information necessary to conduct a case study of a police department, including officer behavior and the independent variables that theoretically affect police behavior. The qualitative data were collected by using the general principles of observation and content analysis with a special emphasis on protocol analysis. Unlike the previous research, we are interested in the formation and creation of cognitive suspicion, as well as in formal actions (e.g. stops) taken by the police.

During the summer and fall of 2002, field observers accompanied officers in each of the four precincts and on all three shifts in Savannah, Georgia. Observers went on 132 tours with officer. Observers were trained to focus on how the officers spent their discretionary time. They were trained not to record any activities that were generated by radio calls, other officers, or situations in which they served as a back-up officer. Observers were instructed to watch the interactions between the officer and suspect(s), to document what they saw and to note the sequence of events as they unfolded. They were provided structured questionnaires that included language for their questions and space to record officer responses.

Observers were trained to take note of occasions when officers appeared to notice a suspicious person or incident but ultimately decided not act upon it; in such instances observers were instructed to question the officer about his or her behavior at an opportune time. 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 at the time. In other words, the observer would ask what caught the officer’s eye and what made the officer proceed without acting. Observers also recorded the interactions between an officer and a citizen when suspicion actually led to a stop. In these instances observers were trained to complete a questionnaire concerning the officer and his or her patterns of behavior, a task undertaken when the officer was not engaged with a citizen.

There are two units of analysis in this study, each based on a stage in the officer's decision-making process: (1) the officer becoming suspicious of an individual, and (2) the officer making a stop based on the suspicion. First, we examine the decision to form a suspicion in relation to the characteristics of the areas patrolled, the persons encountered, the days and times suspicion was formed, and finally, the characteristics of officers. We next analyze the officer's decision to stop a citizen in relation to our independent variables. Lastly, we discuss factors associated with the various alternative outcomes of a stop (e.g. use of force, searches, tickets, and arrests).

Findings

Officers formed suspicion when they observed something unusual, became curious or otherwise distrustful of an individual. During 132 tours where officers were accompanied by observers, officers formed suspicion 174 times. On average, an officer would form suspicion once ($X = 1.32$; S.D. = 1.27) during a tour of duty (or shift). Officers did not form suspicion on 60 of these tours,. However, on one tour, an officer formed seven suspicions. In the majority of cases, individuals were driving vehicles, opposed to being on foot, at the time suspicion was formed or stops were made (70% and 73.8%, respectively). The majority of persons who aroused the suspicion of officers, or who were stopped by police, were male (74%) minority group members (71%) who averaged thirty-two years of age. However, Blacks constituted a slightly higher percentage of suspicions (71.0%) than stops (68.9%), while whites had an inverse pattern (they constituted 29.0 % of the suspicions and 31.1 % of the stops.

Bases for Suspicion

When an officer was curious about a citizen or became suspicious, observers asked the officer to provide them with the reason(s) for this concern. The reasons provided by observers were coded according

to the following categories: (1) appearance, (2) behavior, (3) time and place, and (4) information. "Appearance" refers to the appearance of an individual and/or vehicle, and can refer to things such as distinctive dress, indicators of class, vehicle type, color, condition, and the like. "Behavior" refers to any overt action taken by an individual or vehicle that seemed inappropriate, illegal, or bizarre. "Time and place" refers to an officer's knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours). Finally, "Information" refers to information provided by either a dispatcher or fellow officer (e.g., BOLO).

The main reason for forming suspicion was the behavior of the suspect(s). In the overwhelming majority of cases (66%), the officer told the observer that the behavior of the suspect(s) was the primary reason for forming suspicion. An analysis of observer descriptions of behavior revealed that the most likely behavioral reasons for forming suspicion of an individual/vehicle were traffic violations (e.g., running a red light, driving with expired plates), avoiding officers (e.g. turning around and walking the other way, hiding face), and looking nervous in the presence of the officer.

More than 18% of the suspicions were stimulated by information provided by either a dispatcher or fellow officer. This usually involved "Be on the Lookout" bulletins, or other information provided by the department or fellow officers concerning characteristics of suspects, crimes, or vehicles thought to be related to specific crimes. An analysis of observer descriptions of the types of information officers used revealed that the most likely types of information used for forming suspicion of an individual/vehicle were descriptions of personal characteristics, clothing, or descriptions of vehicles that were either stolen or thought to have been used in a crime.

Nearly ten percent of the reasons given for becoming suspicious of a person were related to time and place. These cases involved an officer drawing on his or her knowledge of a particular location (e.g.,

park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours). An analysis of the observers' descriptions of the situations which caused officers to become suspicious revealed a wide variety of situations, including a car parked near a school in the woods at night, a car driving slowly in a warehouse district late at night, and passengers in a car who do not match the ethnicity of the neighborhood they are driving in (especially at night).

Finally, nearly six percent of the reasons given by the officers for becoming suspicious were related to the appearance of the person(s). This criteria involved distinctive dress, indicators of class, vehicle type, color, and condition. An analysis of the observers' descriptions, as to which characteristics led officers to become suspicious, revealed characteristics such as a vehicle with heavily tinted windows, a dirty or damaged vehicle, an individual wearing gang colors, or an individual looking "strung out" like a drug addict.

Overall Patterns of Officer's Decision-Making Concerning Suspicion

To obtain an assessment of each officer's overall decision-making style, observers recorded the factors which the officer took into account when forming suspicion. It should be noted that this was an *overall* assessment of the officer, and not an assessment of the officer with regard to any one particular incident.

"Appearance," referring to things such as distinctive dress, indicators of class, and the like, appeared to be an important factor for the majority of officers, with most officers rating appearance with a medium priority rather than high priority. Observers' explanations of these ratings were qualitatively analyzed to provide some insight into the reasons officers considered appearance important or unimportant. The following are some explanations given by officers who rated appearance as a medium or high priority:

- Despite ethnicity, if someone is wearing all black clothing, this is an indication that they are up to no good

- Officer is well acquainted with people and places in his beat; he can tell based on appearance who "doesn't belong"
- Person who looks "different" raises suspicion (e.g., white person in black neighborhood).

In contrast, officers who rated appearance to be of low priority typically provided one of two explanations: (1) that most people encountered looked similar enough to render appearance meaningless as a factor that might arouse suspicion, or, (2) that they did their best not to judge people based on their appearance.

Most officers described behavior as playing a significant role in their decision-making. Nearly half of the officers reported that behavior was a high priority and an additional one-third stated that behavior was a medium priority in forming suspicion. Again, observers' explanations of their ratings were qualitatively analyzed to provide some insight into the importance of behavior in forming suspicion. The following are examples of comments provided by officers who treated behavior as being of medium or high importance in forming suspicion:

- Police officer stated that he watches out for the “felony stare” (i.e., getting nervous when they see a police car, making every effort to avoid the police).
- Police officer said that behavior is very important to him because he can tell when a person is lying to him. He can tell this by the way they act.
- Police officer said he can tell if someone has done something just by how they respond to him.
- “It is very important to tell if they are fidgeting.”

Analyses conducted on the importance of time and place in officer decision-making revealed that, in a little over one-quarter of cases, time and place were irrelevant to whether officers formed suspicion. For the majority of officers observed in this study time and place was either of medium or high priority. Most often, this was related to people/vehicle(s) being out of place in a particular location at a given time. For instance, officers often relied on their knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours) to form suspicion. For example:

- People who look out of place (e.g., white person in black neighborhood) get stopped in places that have higher incidence of crime

- People can use the dark to their advantage to aid them committing crimes, therefore more attention paid at night
- People who look out of place are very suspicious, especially white people in a black neighborhood.
- People who were where they shouldn't be (e.g., juveniles on a school playground at night) got stopped

Observers were also asked to rank the importance that information might have in determining the decision-making of police officers. A small number of observers believed that information rarely played a role in whether officers formed suspicion. In contrast, observers believed that the great majority of officers treated information as high priority.

Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle

Now we will change our focus from the first unit of analysis (an officer becoming suspicious of a citizen) to the second unit of analysis (an officer making a decision to stop the citizen, based upon suspicion). It is important to note that "forming suspicion" did not necessarily result in stopping an individual. However, officers did stop the individual under suspicion the majority of the time (n=103 or 59%). In cases where no stop was made, the officer's continued observation of the suspect(s) convinced him/her that the original concern was unwarranted. Furthermore, since officers formed suspicion a total of 174 times and made a total of 103 stops, we can calculate that officers made an average of less than one stop per ride on the basis of suspicion.

A correlation was computed for each of the independent variables and the decision to stop a person under suspicion. It is interesting that none of the **suspect characteristics** examined significantly influenced the likelihood of a stop. In other words, once the officers became suspicious of an individual they were equally as likely to stop the person whether or not the person was male or female, African-American or white, young or old, or perceived to be of a low or high socioeconomic status. The **type of area** in which the observation was made did have a significant effect on whether a stop was made by the

officer. Suspicions were significantly less likely to result in stops in residential areas (46% of the time) when compared to the other types of areas, which ranged from 72% to 80% of the time.

Stops were significantly related to whether the observation occurred **during the weekend** or not. Suspicions resulted in actual stops 69% of the time during the weekdays, but only 41% of the time during the weekend (Friday and Saturday nights). It is quite likely that weekend nights are generally far busier times for law enforcement and officers cannot follow up on suspicious behaviors they observe as often as during the less busy time periods.

The **nature of the suspicion** also was influential in determining the relative likelihood that an officer would make a stop. Officers were significantly more likely to make stops when they had formed suspicion on the basis of the suspect's behavior (75% of the time), but significantly less likely to make a stop if they had formed suspicion on the basis of time and place (29%) or information (34%).

Finally, two **officer characteristics** were associated with making a stop of an individual. Older officers and officers with a high school education were significantly more likely to make stops than younger and more educated officers. Officers with a high school education made stops in 70% of the incidents which they defined as suspicious, a significantly higher percentages than that of educated officers. The mean age of officers making stops after forming suspicion is 34.5 years, which is significantly older than the mean of officers forming suspicion but not making a stop (31.3 years).

Officer and Suspect Demeanor throughout the Interaction

Observers recorded the demeanor of suspects and officers at various points during the encounter. Overall, officers acted more positively toward suspects than suspects did towards officers. Suspect and officer demeanor changed at approximately the same rate during their interaction, and in roughly one-

fourth of all cases, the officer and suspect changed their demeanor during the course of the encounter.

The nature of an officer's and/or suspect's change in demeanor was evenly divided between changes for the better and for the worse. Officers tended to hold more positive attitudes toward suspects than suspects did towards officers. Regardless of whether an officer's demeanor changed for the better or worse, officers appeared overwhelmingly to be responding to the attitude/demeanor displayed by the suspect.

Very few officers were disrespectful toward the person they stopped. Of the four cases where an officer was disrespectful to the citizen, only one was assessed as being unprovoked; in the remaining instances officers were reacting to disrespect exhibited by the citizen. While the overall percentage of suspects who displayed disrespect to the police was also relatively low, suspects were disrespectful at over twice the rate of officers.

Factors Associated with the Outcome of a Stop

A correlational analysis was performed on a number of variables (area, time, individual characteristics of the actors, and reasons for becoming suspicious) that may have an impact on selected outcome measures (resistance, frisked, coercion used, being searched, issued a warning, ticket or being arrested). We discuss important relationships that emerge from this analysis in the sections below.

Characteristics of the Area

Characteristics of the area had an impact on whether or not the suspect was frisked. Suspects were more likely to be frisked if the area was private and when the area was residential. Further, suspects stopped in commercial areas were more likely to be issued a ticket (45%) than suspects stopped in residential areas (25%). There were two characteristics of areas that did not make a difference on any of

the stop results: the racial makeup of the area and areas the officer thought were "trouble spots." Also, neither time measure—stops made after dark and stops made on weekend nights—affected stop outcomes.

Suspect Characteristics

Only one suspect characteristic was not related to any of the seven outcome variables: the race of the suspect did not affect the measured outcome of stops. Gender was related to the likelihood of being frisked and receiving a ticket. There was a five times greater likelihood of males being frisked than females. However, females who were stopped were nearly twice as likely as males to be issued a traffic ticket. Age was related to the likelihood of being frisked and of the vehicle being searched. Younger persons were significantly more likely to be frisked or have their vehicle searched than older individuals.

The perceived social class of the suspect was related to only one outcome variable, but the one which is the most severe: being arrested. Stopped suspects perceived by the officer to be lower class were arrested 25% of the time, while suspects perceived to be middle class were arrested only 6% of the time. Only four suspects were perceived to be in the upper class, and none were arrested. The reason for the greater likelihood of arrest of lower-status suspects is unclear. It may be due to a higher offending rate of lower-status citizens.

The suspect characteristic most consistently related to the results of stops was whether the suspect was under the influence of alcohol or drugs at the time of the stop. When this was the case, the suspect was significantly more likely to resist the officer, to be frisked, to have force used against him/her, to have their vehicle searched, and also to be arrested. More specifically, suspects under the influence of alcohol or drugs were approximately ten times more likely to resist (33%) than suspects not under the influence (3%). Further, suspects under the influence were about five times more likely to be patted down (75%) than other suspects (15%), and more than twelve times (25%) more likely to have force used against them during the encounter with the police than suspects not under the influence (2%). Police officers decided to search the

vehicles of 50% of the suspects under the influence of alcohol or drugs, but only 5% of the vehicles of other suspects, a ten times greater likelihood. Finally, the suspects under the influence of alcohol or drugs were fourteen times more likely to be arrested (42%) than suspects not under the influence (3%).

A Brief Look at Outcomes and the Source of Suspicion

When the reason for forming suspicion was behavior (versus appearance, time and place, or information), suspects were significantly less likely to resist, to have force used against them, or to be frisked. However, they were significantly more likely to be issued a ticket. More specifically, only 2% of the suspects who were selected by the officer for observation because of their behavior ended up resisting the officer. Compare this figure to the 45% of suspects who resisted when the officer began observing them because of specific information received by the officer about the situation. There were too few cases involving suspicion based on appearance or time and place to allow valid comparisons with these categories. Patdowns were more likely to result when the officer had specific information (e.g. BOLO) that led him/her to become suspicious (82%) when compared to all the other reasons for forming suspicion. Suspicions formed strictly on the behavior of the suspects only resulted in patdowns 16% of the time. Officer use of force occurred most frequently when officers had specific information that led them to become suspicious (4 out of the 5 instances of force). Issuing tickets, on the other hand, came mostly from suspicions formed because of the behavior of the suspects (41%). This finding is logical as the behavior that the officer observed most often was a traffic violation. When information was the basis of suspicion, suspects were significantly more likely to resist, to have force used against them, or to be frisked and arrested. When information led officers to become suspicious of an individual, the suspect was significantly less likely to be issued a ticket.

Characteristics of the Officer

In a perfect world, staffed with perfectly trained officers who follow specified policies and

procedures to the letter, we would expect officer characteristics not to factor significantly in officer decision-making. In this study, only two officer characteristics influenced the results of stops, and each influenced only one outcome. The first is the officer's race, which influenced the likelihood of suspects receiving a ticket. White officers were more than twice as likely to issue tickets during their stops as were other officers.

The second officer characteristic to have an influence on the outcome of stops is an officer's length of tenure in the police department. Officer tenure was correlated with the resistance offered by suspects: officers with longer tenure were more likely to have a suspect offering resistance. Either the more senior officers are handling cases with a greater likelihood of suspect resistance or they are doing something that creates more resistance from the suspects (e.g. rougher treatment, less patience).

Reasons for Stopping Suspects

As with the previous analysis, we examined the descriptions of the officers' rationale for making a stop. The narrative descriptions of these cases indicate that the probability of stopping a citizen was greatly influenced by officers observing citizens committing traffic related offenses. Importantly, these narrative descriptions reveal further evidence that the reasons for non-behavioral suspicion differ from those that cause the police to stop citizens.

Conclusions

Research on the police has relied on observational strategies to develop rich and important information on the behavior of police and the public they serve in a natural setting. Our study, undertaken in cooperation with the Savannah Police Department, is based upon the ideas and data-collection instruments developed in earlier research efforts. One of the major differences in the methodology used in this study is the selection of police-citizen interactions used for analyses. Our unit of analysis is the

formation of officer suspicion and the stops that are pursuant to that suspicion. Relying on the general principles of observational research and content analysis, we incorporated Staged Activity Analysis and Protocol Analysis into a hybrid methodology. This approach to collecting the data was successful in that ride-along observers were accepted by the police, thereby establishing the rapport necessary to collect the required information. From our descriptive analyses, several conclusions emerged:

1) Officers formed suspicions quite infrequently. Most officers only formed one suspicion per shift, but the average was 1.3 per shift. It was very unusual for an officer to form more than three suspicions per shift.

2) For the most part officers formed suspicions using legitimate criteria. In the majority of cases, the officer told the observer that the behavior of the suspect(s) was the primary reason for forming suspicion. An analysis of the observers' descriptions of behavior revealed that the most likely behavioral reason for forming suspicion of an individual/vehicle was a traffic violation (e.g., running a red light, driving with expired plates).

3) Forming a suspicion did not necessarily result in a stop. Stops were made a majority of the time (less than one per shift), however there were instances when continued observation of the suspect(s) convinced the officer that the original concern was unwarranted.

4) While deployment patterns were not part of the analyses, it is likely that they are an important factor in explaining where most suspicions and stops occurred. The characteristics of areas where most suspicions were formed and where most stops were made are as follows: the majority of suspicions were formed in residential areas, and the greatest percentage of stops occurred in commercial areas. While the majority of the suspicions and stops were made in areas that were not considered particularly dangerous, they did occur in predominantly African-American areas.

5) The demographic characteristics of the citizen about whom officers formed suspicion, or who were

stopped, were young minorities. However, Blacks constituted a slightly higher percentage of suspicions than stops, while whites had a slightly higher percentage of stops than suspicions.

6) During the course of stops, officers acted more positively toward suspects than suspects did towards officers. Suspects were nearly three times more likely than officers to be negative and twice as likely to be disrespectful at the beginning of an encounter. Only a handful of officers had a negative initial demeanor or acted disrespectfully towards the citizen. Suspect and officer demeanor changed at approximately the same rate during their interaction, with half turning more negative and the other half turning more positive. Officers appeared to be responding to the attitude/demeanor displayed by the suspect. According to this measure, citizens being disrespectful were nearly twice as likely to be ticketed or arrested compared to citizens showing respect to the officer.

7) Officers were significantly more likely to make stops when they had formed suspicion on the basis of the suspect's behavior, rather than on the basis of time and place, information, or appearance. Suspect characteristics, such as gender, ethnicity, socio-economic status, and age, did not significantly influence the likelihood of a stop after a suspicion was formed. However, non-behavioral suspicions were most common when a suspect and an officer were both Black and least common when an officer and suspect were white.

8) Only two officer characteristics, age and education, were important determinants of the decision to make a stop. Older officers and officers with a high school education were significantly more likely to make stops than younger and more educated officers. Interestingly, white officers were more than twice as likely to issue tickets during their stops as other officers.

9) Suspects under the influence of alcohol or drugs negatively influenced the interaction. Suspects under the influence of alcohol or drugs at the time of the stop were significantly more likely to resist the officer, to be frisked, to have force used against him/her, to have their vehicle searched, and to be arrested.

10) Most officers reported that they had working rules to help them identify suspicious persons or to

determine how to handle a particular situation.

11) While most of the officer decisions were based on behavioral criteria, decisions based on the non-behavioral criteria were also important. In contrast to officer decisions based on behavioral criteria, the small percentage of decisions based on non-behavioral criteria can be explained by suspect and officer demographic variables. For example, officers were significantly more likely to form a non-behavioral suspicion when the suspect was Black and the officer had longer tenure.

12) Most of the stops were routine and resulted in no consequence for the citizen. When there was a consequence, the most common was a warning or a ticket. An arrest was made in less than 10% of the stops. Further, coercion against the citizen was seldom used and citizen resistance was uncommon. Frisking or searching suspects was more common than force, but most often came subsequent to an arrest or following suspect resistance. Coercion was never used unless the suspect offered resistance.

These conclusions are significant in several respects. First, to the best of our knowledge, this is the first attempt to assess officer decision-making before the actual stop is made i.e. when officers are in the initial stages of forming suspicion. Second, our findings do not support the speculation that it is during this pre-stop stage of decision-making that major levels of discrimination are likely. In our analysis of the observations, very few problematic attitudes and behaviors surfaced. As in other observational research, most of the officers' time was spent in routine activities with routine outcomes. The Savannah study failed to uncover any serious or major flaws in how the police managed their interactions with citizens. However, in any organization, there is always room for improvement. We did uncover some stops based on non-behavioral criteria, and it is from these few potentially problematic interaction patterns that our policy suggestions are based.

Policy Implications and Future Research

Our findings and conclusions have important policy implications regarding the management of police officer discretionary time, and for the development of officers' decision-making skills. The policy implications of our research are in many ways similar to findings in other observational studies: changing police officers' attitudes alone will not change their behavior on the street. It is clear that if changes are desired, managers must provide data-based training to educate officers about their actions. This training must be supported by close supervision to assure that the desired behavior is taking place.

Since officers form suspicions relatively infrequently, it may be necessary to create a workload analysis to determine how officer discretionary time is used. We did not record the time officers spent responding to radio calls and other service so it may be that very little time exists for discretionary stops and the formation of suspicions. However, managers may be able to encourage officers to use their available time more efficiently, effectively, and productively.

As our research is the first to address the formation of suspicion, it is difficult to determine the value of these decisions. Our data show that not all suspicions resulted in an official response. This could mean that some of the criteria used by officers to form suspicion are proper and valuable, while using other criteria is unfounded and inefficient. Clearly, more attention and research needs to be done in this area, but our preliminary findings can guide future researchers and police managers.

Officers formed the majority of their suspicions in function of a citizen's behavior. However, there were some times when officers became suspicious about citizens based on non-behavioral criteria. Since these are the most problematic, officers need to understand their likely outcome and consequences. In other words, people are more likely to be angry and resentful of a police officer who becomes suspicious without behavioral cues. Training and role-play could help officers and managers understand the process of forming suspicion. In addition, special attention should be focused on managing intoxicated citizens as they are the most likely to have a bad attitude and resist an officer's actions. We learned the prevalent

nature of working rules that govern officer behavior: it is vital that police managers be aware of these "rules" and that they ensure such rules remain consistent with both departmental policy and its mission statement.

Ch. 1 Police Officers' Decision Making and Discretion: Forming Suspicion and Making a Stop

Introduction

Most police activity occurs in private, away from the public's view. This creates a situation that allows police officers discretion in the way they think about what they see and how they handle those with whom they come in contact. There has been an effort by the research community to examine issues concerning how police act and respond in general and what police do specifically when they interact with citizens. A conspicuous void in this research effort has been the lack of attention paid to the process by which police officers form suspicion about a suspect, whether or not a formal intervention such as a stop was made.

The present study includes a study of police officers in Savannah, Georgia, who were observed and debriefed after incidents when they showed some sign of becoming suspicious about an individual or vehicle. Observers accompanied officers on 132, 8-hour shifts, during which time the officers formed suspicion 174 times. "Forming suspicion" occurred any time an officer became doubting, distrustful, or otherwise troubled or concerned about an individual. 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 a stop of an individual or vehicle. In some cases, the officers realized that their initial "suspicion" was unwarranted and the officers continued to go about their routine activities. This is demonstrated by the fact that only 103 stops resulted from the 174 suspicions that were formed by the officers during the times they were observed. Before explaining the present research protocol and analyses, we describe the past research on police officer behavior that shaped our study and its methodology.

One of the weaknesses of the research on policing is that it has neglected the police officer's method or approach of forming suspicion. The majority of research on police behavior has focused on the actions taken by the officer after a contact with a citizen has been made. Specifically, the majority of the research on police behavior has concentrated on the decision to intervene formally and on whether or not to make an arrest. The influences on these decisions made by police officers are best determined by observing the police in action. Three major observational studies of police patrol activities have been conducted since the 1960s. The first was the ambitious study conducted by Albert Reiss, Jr. for the President's Commission on Law Enforcement and Administration of Justice (Black and Reiss, 1967). This work included systematic observations of the police in Boston, Chicago, and Washington, DC, throughout 1966. The focus of the study was to collect detailed descriptions of police and citizen behavior during their encounters. Second, the Police Services Study (PSS) observed officers who patrolled 60 neighborhoods in 24 agencies located in three metropolitan areas, including Rochester, NY., St. Louis, MO., and Tampa-St. Petersburg, FL. Data were collected on almost 5,700 police-citizen encounters during the summer 1977 (see Worden, 1989). Most recently, the Project on Policing Neighborhoods (POPN) collected data on approximately 11,000 police-citizen contacts from 12 selected beats in the Indianapolis, IN. and St. Petersburg, FL. police departments (Mastrofski et al., 1998). All of these studies, as with other observational research, have methodological strengths and weaknesses. Specifically, observational studies are designed to improve our understanding of the interactive processes that occur during a police-citizen encounter.

The neglected area of research comes logically prior to the official or formal police-

citizen contact, but during the process in which an officer forms a suspicion and the citizen is transposed into a suspect. Before discussing that aspect of policing, we will present a brief assessment of prior research on police officer behavior.

Research efforts using both quantitative and qualitative methods have attempted to explain the behavior of police officers when they interact with citizens (Riksheim and Chermak, 1993; Worden and Shepard, 1996), the characteristics of the environment or area in which the police activities occur (Klinger, 1997; Riksheim and Chermak, 1993; Brown, 1981), the characteristics of the officers and suspects involved in the contact (Crank, 1993; Brooks, Piquero, and Cronin, 1993; Riksheim and Chermak, 1993; and Worden, 1989), and the characteristics of the police organization (Riksheim and Chermak, 1993; Wilson, 1968; Mastrofski, 1981; Sherman, 1983). These and other studies on police decision-making and discretion certainly provide important information on the determinants of police officer behavior. Clearly, the seriousness of the alleged offense and the strength of evidence of criminal wrongdoing against a suspect influence officers' actions and any decision to invoke their authority by controlling the suspect or making an arrest (National Research Council, 2003). Beyond the influence of legal factors, the impact of extra-legal factors on police behavior, such as race, age, gender, sobriety, and demeanor of the suspect, is weak and/or inconsistent (National Research Council, 2003).

As noted, our present knowledge of police decision-making is limited to the taking of formal action, such as making an arrest. Further, our knowledge is based on a limited number of influential studies. These include Wilson (1968:38), who suggested that agency type encourages officers to make judgments both about an individual's character and the overall situation before

dispensing distributive justice. Worden (1995:50) argued that police officers act on their belief system, which is "comprised of beliefs, attitudes, values, and other 'subjective outlooks'." In other words, officers develop indicators that are used to determine their behavior. Brown (1981), Muir (1977) and Ericson (1982) have all advocated police attitudes or orientations as a basis for understanding police discretionary behavior. Certainly, experience helps officers draw conclusions concerning an individual's suspiciousness, propensity to commit a crime, and moral character (Werthman and Piliavin, 1967). This determination helps the officer respond to the individual, the situation, and the environment. Perhaps it is Ericson's "recipe of rules" (1982:25) that describes best how an officer develops his or her personal style of policing. In other words, an officer's collection of "rules," combined with her or his pre-established attitudes, values, and beliefs, provides an interpretive framework in which behavioral cues are evaluated, and behavior is formed. This "recipe of rules" may be a starting point to help understand the interactions, signs, symbols, cues, and behavior, of each actor in a police-citizen encounter.

Most recently, Novak et al. (2002: 75) present a review of the literature on police behavior and conclude that legal variables such as seriousness of offense, amount of evidence, and presence of a weapon, among other factors, all have a strong and constant influence on formal decisions made by police officers. These researchers report that research findings on the influence of situational variables, including suspect and victim characteristics, are mixed and controversial.

Situational and Environmental Factors

The environment in which an interaction takes place is another important influence on an officer's decision-making process. Environmental factors that require investigation include

neighborhood characteristics and the crime rate. Other theoretically interesting neighborhood factors include issues of social control, poverty, percent minority, vacant housing, public assistance, percent renters and owners of homes, unemployment, female-headed households, and residential stability, among others. Research on the use of force and deadly force indicates that in lower class and high-crime neighborhoods the police are more likely to engage in these actions (Jacobs and O'Brien, 1998; Smith, 1986). Further, Smith (1987) reported that social factors, including race, gender, and demeanor, all influence an officer's decision to arrest a suspect. Sykes and Brent (1983) note that the social settings in which contacts occur may influence an officer's decisions to arrest a suspect. They also report that if suspects comply with an officer's requests, the nature of the encounter may not intensify, while non-compliant suspects can lead to an escalation of words and actions.

Individual Factors

Individual factors conceptually play an important role in a police officer's decision-making processes. Variables including social class, gender, age and physical size are important considerations for study (Gottfredson, and Hindeling, 1979; Lanza-Kadruce and Greenleaf, 1994; Mastrofski et al., 1996; Riksheim and Chermak, 1993). Other factors are the attitudes of both the officers and the citizens. Worden (1989) reports surprisingly, and in the aggregate, that attitudes do not explain the variation in officers' behavior. Similarly, Poaline, Myers and Worden (2000) explain that officers' characteristics generally do not greatly influence their outlook on their work. However, the individual attitudes of officers and suspects can change the context, actions, and outcome of the interaction. If an officer or citizen is having a "bad day," or displays a bad attitude, the other actor may respond negatively, and the interaction may become

problematic.

General sociological theory (Rawls, 2000), as well as research on policing (Barlow and Barlow, 2000), clearly shows the importance of the race of the actors involved in police-citizen contacts. For example, Rawls notes that there are underlying expectations that differ between the two groups regarding such simple tasks as conversation. Barlow and Barlow (2000: xiii) suggest that police research must be multicultural and not forget "views of the communities that are policed." The importance of race in policing cannot be overlooked and must therefore be seen as an integral part of any research scheme. As Rawls (2000) and Barlow and Barlow (2000) point out, race has an important influence on the interactions between the police and the public. Typically, race has been used as a control variable in research on police behavior. Unfortunately, research findings have not provided definitive results concerning the influence of race on police decision making. Research also shows mixed results on the influence of suspect race on police response and on the influence of officer race on suspect reaction. For example, some studies indicate that African American suspects are more likely to be arrested and/or to be treated more harshly by police than white suspects (Powell, 1990; Smith and Visher, 1981; Smith and Davidson, 1984), while other studies report no effect (Klinger, 1996; Smith, 1984). The research is also mixed on the importance of race with regard to both the use of deadly force (Geller and Karales, 1981; Blumberg, 1981; Fyfe, 1980) and non-deadly force (Law Enforcement News, 2000; Dunham and Alpert, 2004). After an exhaustive review of the literature, the National Research Council (2003: 3) concluded that:

> This research finds that the impact of legally relevant factors is strong. Taking these into account, the class and gender of suspects play a small role. However, more research is needed on the complex interplay of race, ethnicity, and other social factors in police-citizen interactions.

Among officer characteristics, neither race, nor gender has a direct influence on the

outcome of routine police-citizen encounters, and there is no clear effect of officer's attitudes, job satisfaction, or personality.

A recent area of research, that of racial profiling, has begun to examine whether or not police officers use race to discriminate against minorities. Research on racial profiling is attempting to capture officers' pre-conceived notions and practices of discrimination by race. To date, the research that has been conducted cannot confirm or refute whether officers discriminate against members of racial minority groups. This shortcoming can be attributed to methodological weaknesses, including the lack of a proper denominator to determine if traffic stops or searches of minorities are significantly different from stops and searches of white citizens. To develop more accurate findings, research on racial profiling needs to include information on officers' and suspects' behavior. This can be achieved by collecting qualitative methods and quantitative data from the agency, the census, and an appropriate baseline measure of offenders. One of the areas of research on profiling that has received a lot of attention recently centers on the link between race and place (Meehan and Ponder, 2002). Obviously, as police officers learn more about the areas in which they patrol, they create meanings for those places. Often, the stereotypical images the officers create form the expectations of what they anticipate seeing and experiencing within artificial geographical boundaries. When officers observe what they do not expect or anticipate, they can become suspicious about the person or situation.

Cognitive Learning and Suspicion

Cognitive theorists recognize that learning involves the acquisition or reorganization of information or observations and that the relative power of the learning varies by the degree of familiarity, and repeated number of associations (see Good and Brophy, 1990). Constructing, developing, and learning cognitive schema, which can be considered shorthand for organizing

and storing information, often start as simple and loosely organized networks but can evolve into systematic and complex relationships. Research findings provide evidence that these schemas form a mental model that play a key role in predicting a person's responses to other individuals, places, and things, in future encounters or events (Brehm et al., 2002, Bower et al., 1979 and Read, 1987). Once formed, persons, places, or things that have familiar characteristics or properties, activate these cognitive schemas. For example, it is likely that these schemas or biases will be triggered when making an observation, or during an encounter with a person, place, or thing, that is part of one's mental model. Specifically, a person may respond in a learned way to another who is a member of a particular group with which he or she has experiences or a history. Once a person has identified another individual or a group by an assumed role, future behavioral patterns will be predicted upon the developed schema. These schema or stereotypes can be formed by people with or without specific training, and about groups with individual or social characteristics: they are impressionistic and are based on perceptions, which may or may not reflect reality. On the one hand, average citizens may not have a well-developed schema for dealing with persons who are suspicious or who pose a threat to them. On the other hand, police officers should be trained to identify suspicious and threatening people. In fact, research shows that police officers are more likely than civilians to apply a "cognitive schema" that interprets actions that are unfamiliar or of uncertain intent as suspicious (Ruby and Bringham, 1996). That is, police officers are likely to become suspicious about things that they do not believe fit the situation, time, or place, as well as of things that they do not understand. As officers become suspicious, they may act on these suspicions and approach or confront a citizen. When this occurs, citizens may not understand why they are

being approached or perhaps think they are being "hassled," and may respond negatively. The officer may see this response as a bad attitude or a negative demeanor.

Many attempts to study the interactions between the police and citizens have used citizen demeanor as an explanatory variable. This research includes efforts in the 1970's by Lundman (1974, 1994), by Worden and Shepard (1996), who reanalyzed the Police Services Study data, and by Klinger (1994, 1996) who used data from the Miami-Dade Police. Worden and Shepard reported results similar to those found by Lundman and concluded that "... police behavior is influenced by suspects' demeanor..." (1996: 99). Klinger concluded that, after controlling for crime, demeanor did not have an independent effect on arrest. He reported that suspects with a negative demeanor are more likely to be arrested because they commit crimes against and in front of the police, not because they show a lack of respect for the officer (Klinger, 1994).

In his subsequent analysis of the same data, Klinger isolated interactions involving "extreme hostility" (Klinger, 1996: 69). Although his findings were weak, he concluded that the "analyses conducted show an increased likelihood of arrest when citizens display 'extreme' hostility, which suggests that displays of hostility may independently increase the odds of arrest once they pass a severity threshold" (1996: 75). The studies on suspect demeanor result in different conclusions in encounters that remain at a low level of conflict between the officer and the suspect. When the encounter involved "extreme hostility," all the studies' findings concur that a suspect's demeanor will have some influence on an officer's decision to affect an arrest (Klinger, 1996). The level of hostility was determined by coding the suspect's words and gestures at the point of initial contact between the citizen and the officer in order to determine her or his degree of cooperation. Recently, Engel, et. al. (2000: 255), in another analysis of the

PSS data, report that demeanor matters and that "officers are more likely to take formal action toward suspects who fail to show deference." A limitation of research on suspect demeanor has been the reliance on the initial point of contact as a determination of suspect demeanor. As noted by many of the researchers, we need to have a more comprehensive understanding of what occurs during the police-citizen interaction before we can understand the impact of a citizen's demeanor on police behavior (see Fyfe, 1996).

The Present Research

The present effort attempts to fill some of the gaps in the previous research. Our methodology integrates quantitative and qualitative data collection efforts in an effort to improve the quality of our data. Our quantitative data includes the routine information necessary to conduct a case study of a police department, including officers' behavior and the independent variables that theoretically affect police behavior (see Chapter 2 on methods). The general principles of observation and content analysis, with a special emphasis on protocol analysis, were used to collect the qualitative data (see Ericsson and Simon, 1984). Although most of the previous research using protocol analysis has been limited to laboratory environments, there are strong reasons to believe that the proper data could be collected in field observations of the police. For example, Cromwell et al. (1991) utilized a similar method, labeled "Staged Activity Analysis," in a study examining the decision-making processes used by burglars. He provides a strong rationale for using this method (1991: 42):

> We suggest that research reporting that a high percentage of burglars make carefully planned, highly rational decisions based upon a detailed evaluation of environmental cues may be in error. Our findings indicate that burglars interviewed in prison or those recalling crimes from the past, either consciously or unconsciously, may engage in rational reconstruction B a

reinterpretation of past behavior through which the actor recasts activities in a manner consistent with 'what should have been' rather than 'what was.'

Worden and Brandl provide a solid explanation as to why protocol analysis could strengthen and improve our knowledge of the police (1990: 303):

> Given the ambiguity and uncertainty of police officers' task environments, models that include only situational and/or organizational factors, without specifying the processes whereby these cues are translated into choices, are unlikely to explain the performance of any but rather simple police tasks. The cues that are salient, the meaning(s) imputed to them, the goals or objectives toward which officers responses are directed, and their beliefs about how much each of the alternative courses of action will contribute to meeting those objectives, are the premises on which officers' decisions are likely to rest.

In other words, as officers make observations in the field, they are asked for verbal reports of the cognitive steps they took to reach any decision or conclusion. They are asked to "think out loud" and verbalize their cognitive steps. This method allowed the observers to record their observations of events and to record the officers' version of the steps taken to make decisions during the event. In our case, officers are asked to respond almost immediately after the process of decision-making takes place. In fact, as officers became comfortable with the "thinking out loud," many would start speaking as they made their decisions. The content analysis of the officers' protocols (cognitive steps in making decisions) can increase our knowledge of which cues or indicators are important in officer decision-making, and the meanings of the cues and indicators, when formulating suspicion or a decision to intervene formally. Protocol analysis has the potential to uncover officers' working rules, cognitive strategies, and to determine differences among officers' decision-making processes.

Our study takes the next step in research on policing by investigating the discretionary police-citizen interactions in Savannah, Georgia. By design, the present study is limited to discretionary actions taken by the police. Unlike the previous research, we are interested in the formation and creation of cognitive suspicion as well as formal actions (stops) taken by the police. Obviously, our observations are limited to behavioral cues given by officers. That is, if officers think that something is suspicious but do not say anything or make any visible motion; these suspicions will not be captured by our methodology. Further, our study design does not capture situations when officers perceptions or biases cause them to ignore certain groups of

people whose behavior may be suspicious to others. While these data would strengthen our design and analysis, they would be difficult, if not impossible, to capture.

The following chapters will introduce the research site and explain the data collection instruments and methodology. The report will then turn to the findings and conclusions from the data analyses. A final chapter will make policy recommendations and will present ideas for future research.

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Ch. 2 Site Description and Methodology

Savannah, Georgia

Shortly after the data collection phase of the study concluded, the Savannah Police Department merged with the Chatham County Police Department, forming the Savannah Chatham Metropolitan Police Department. In 2004, the new unified Department (known as the Savannah Chatham Police) consists of 577 authorized sworn officers and 205 authorized civilians. It consists of 6 precincts, including the four currently within the city. Two additional precincts provide patrol for the eastern and western areas of the county. While the merger adds resources and responsibilities to the organization, it did not change the operational structure or philosophy. It certainly does not affect the methodology, findings or conclusions of our study. Dan Flynn remains the chief officer of the new agency and is directing the seamless transition into the unified department. Because the research was conducted when the agency was the Savannah Police Department, we will refer to that agency in our Report.

The City of Savannah is located in southeast Georgia at the mouth of the Savannah River, which forms the boundary between Georgia and South Carolina. It is twelve miles from the Atlantic Ocean. According to the 2000 Census, Savannah has 131,510 residents: 57 percent is African American, 39 percent is white, 1.5 percent is Asian, and 1.5 percent is categorized as "other." Savannah is the county seat of Chatham County where tourism is the major industry. Savannah one of the first planned communities in the United States, and is known for its 21 historic squares designed by General James Oglethorpe in 1733.

The Savannah Police Department (SPD) had approximately 400 sworn officers and was managed through a community policing orientation. The agency earned national accreditation from the Commission on Accreditation for Law Enforcement Agencies (CALEA). The Savannah department was divided into four bureaus each headed by a Major. The bureaus included the Patrol Bureau, the Criminal Investigations Bureau, the Information Management Bureau, and the Support Services Bureau.

The Patrol Bureau is the largest bureau and is responsible for responding to calls for service and providing patrol services. The Patrol Bureau is divided into four precincts, each commanded by a police captain. Precinct 1 includes the downtown historic district, Cloverdale, Savannah's Westside, Hitch Village, Fellwood Homes, the Savannah Airport and surrounding areas. Precinct 2 contains several older neighborhoods in midtown, including Ardsley Park, Baldwin Park, the east and west Victorian districts, and extends to the southwest. Precinct 3 comprises Savannah's eastside, including Blackshear Homes, Savannah Gardens, the Medical Arts area, and Memorial Health University. Precinct 4 includes all areas south of DeRenne Avenue and contains many commercial areas, including both malls, Chatham Plaza, and the businesses along Abercorn, Eisenhower, Waters, and Montgomery Crossroads. This Bureau consisted of 31.8% Black males, 6.4% Black females, 51.2% white males, 4.8% white females, 4.8% other males and .4% 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 our study.

The Savannah Police Department uses Geographic Information Systems (GIS) and

COMPSTAT to assist its management team. The police department has established a strong partnership with Armstrong Atlantic State University (AASU) and has an on-going relationship with faculty and students. Because of this positive history and the proximity of AASU to the police department, Armstrong students were trained to serve as ride-along observers.

Observational Methodology

Observational research has a long and favorable history as a method of collecting information on the behavior of police and the public they serve in a natural setting (Reiss, 1971). The challenge to the method is the operational definition of behavior and the proper and consistent collection of data by a number of observers. Obviously, there are limitations to collecting observational data. One of the most serious concerns is the effect of the observer on officer behavior, or reactivity (Spano, 2004). There are also problems of interpretation. Mastrofski et al. (1998: vii) have identified some problems faced by researchers:

> For example, researchers who wish to record whether officers are respectful to complainants must define "respectful" and "complainant" in such a manner that other researchers record these terms in the same way when observing the same and similar situations. This makes it possible for many researchers to conduct observations, rather than relying on the observations of just one.

Several major studies have used observational methods; most notably, The Project on Policing Neighborhoods (POPN) was conducted in Indianapolis, Indiana and St. Petersburg, Florida in 1996 and 1997 (Mastrofski et al., 1998). The methods and instruments used in the

present study are based upon those used in the POPN study. Since one of the major objectives of the POPN study was the investigation of police discretion, many of the questions in that research were important for the present study, and the instrumentation developed by the POPN researchers was used as a point of departure. Members of the original POPN team were consulted to provide insight in the design and implementation of the forms for the present research. Additionally, the observational instrument used in the Klinger studies was used as a framework.[1] A committee of research personnel, police officers, and citizens reviewed the POPN and Miami-Dade instruments and modified them for this study.

Each observed interaction between an officer and a citizen, included data on the actors, the sequence of actions during the encounter, and the environment in which the encounter took place. The observers noted the physical characteristics of the suspects (race, size, gender, and approximate age), indicators of social class[2] (dress, vehicle, language, etc.), their actions and responses including gestures, tone of voice, and general level of threat to the officer(s). Data also included information on what the officer knew prior to the encounter and whether this information was learned by (roll-call type) briefing, radio, or observation. Information on the area in which an encounter took place was also recorded, as well as ratings of officer-suspect demeanor throughout the encounter. The demeanor rating considered the subjects' actions only

[1] The Principal Investigator was involved in the design of this instrument in the 1980s.

[2] Indicators of social class may not be linked to actual class distinctions, but the perception of an officer creates the reality of the interaction and the officers' response.

as they influenced the officers' response(s). In addition, observers rated whether or not an encounter became hostile and who was the first actor to show hostility toward the other. The specific criteria for this rating, the specific measures, their operational definitions, and measurement criteria were all determined after reviewing other attempts to measure demeanor. A committee of researchers, police officers, and students completed and pre-tested the instrument. During the training workshop, on April 12, 2002, the forms were again reviewed and modified based on input from SPD police officers and supervisors. Each form is discussed in more depth in the section on instrumentation.

Procedure

Twelve criminal justice majors and graduate students at AASU were selected to conduct the field observations. One criterion for selection was an earned grade of a B or better in an undergraduate research methods course that emphasized observational methods and the successful completion (grade of B or better) of an advanced graduate research methods course. These courses provided a focus on observational skills and methods. Thus, all of the students were acquainted with field research methodology, observational and interviewing techniques, skills in taking detailed field notes, the importance of establishing rapport, and ethical issues in research.

On April 12, 2002, the potential student field observers attended a one-day training workshop at the Savannah Police Department. Also in attendance were Major Dan Reynolds, Patrol Bureau Commander, the four police precinct captains, and about 15 police officers, including sergeants, lieutenants, and patrol officers from the four precincts. Trainers were the

Principal Investigator, Dr. Geoffrey Alpert, the co-principal investigator, Dr. Roger Dunham, and the on-site coordinator, Dr. Katherine Bennett from AASU. The agenda for this workshop included a presentation by the principal investigators that covered the goals and objectives of the project and the specific purposes of the ride-along observations. Observational research methodology was briefly discussed, and the draft data collection instruments were distributed and their content, categories and coding rules were discussed. In addition, examples were provided and questions from students and officers were answered. Suggestions for improving or clarifying specific items on the instruments were noted and addressed. Specific ways to conduct observations were covered and students were instructed specifically on the accepted behavior of an observer during low-risk or routine, and high-risk activities. Training emphasized the importance of recording what observers see and hear and also how important it was not to draw conclusions about cause and effect relationships.

The observers were instructed on what to do during routine activities, including when it was appropriate for them to exit the police car and observe interactions closely. The patrol commander and precinct captains conducted this aspect of the training. A major portion of the workshop was devoted to encouraging police officers to voice opinions and to offer their own suggestions as to how the field observers could establish proper rapport and be successful in their observations. Likewise, field observers were able to ask for clarification regarding their expectations and what was expected of them. Researchers and police captains agreed on the random sampling procedures to select officers for observations.

Sampling Strategy

Beginning in April, 2002 and continuing through November, 2002, field observers accompanied officers in each of the four precincts and on all three shifts. The on-site coordinator contacted precinct captains and arranged times for the students to report to the precincts. The captain or lieutenant on duty would randomly assign students to an officer. The captain or lieutenant was asked, for example, to select the fifth officer on the duty roster. If that officer was not assigned to patrol that shift, or was absent, then the name of the officer above and then below on the roster was selected. The student observer was introduced to the selected officer and asked the officer to read and then sign the informed consent form. There was only one instance in which an officer declined to have a rider for a particular shift. In that instance, the officer stated that he was not feeling well that evening and would rather ride alone. A replacement was selected by using the name above that officer on the roster.

The observers were told that they could utilize the first full ride for building rapport. However, some of the observers were able to establish rapport quickly and began recording observations toward the end of the first ride. During the rapport-building time, no notes were taken and the conversation was directed toward the intent and methods of the study. By design observers were told by research staff to arrange three ride-along tours with the same officer. If the observer felt that he or she were familiar with the officer's decision-making style and working rules after one or more complete ride-along, the observer could discuss with the on-site coordinator whether he or she should ride with another officer. Decisions to move from one

officer to another were made by the on-site coordinator. Observers attended every roll call for their shifts and rode with officers through the entire eight-hour work shift, taking notes of officers' activities and documenting each instance where the officer formed a suspicion. Each complete shift required an additional 2 hours for transportation to and from the police department and time for completing notes and debriefing the officer with whom they rode.

In routine activities, observers watched the interactions between the officer and suspect(s), documenting what they saw and the sequence of events as they unfolded. Specifically, the observers learned the importance of documenting social, behavioral, and verbal cues of actors during the events. After an encounter, the observer debriefed the officer as to his or her thoughts during encounters and elicited the officer's overall rating of the encounter. It was important to ascertain from the officer any observations he or she made that helped determine the social class of the citizens, including the type of vehicle, their clothing, or other cues. Observers were trained to make note of times when officers seemed to take notice of something but not act on it and to question the officer about his or her behavior at an opportune time. 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 at the time. In other words, the student would ask what caught the officer's eye and what made the officer continue on without acting. As noted, this method would preclude incidents where officers "thought" suspicion but did not act in a way to catch an observer's attention. Unfortunately, this limited method was not able to take into consideration the level of suspicion, only that an officer acted in a certain way. It is probable that there is a built-in bias against events that created only a low level of suspicion.

During debriefing times, observers also would ask officers what they were thinking when they were taking action and reacting to subjects and behavior.

Any questioning of this sort took place when officers were not otherwise occupied and were receptive to being interviewed, or at the end of a shift. All students took care to make their observations in as unobtrusive a manner as possible. As stated earlier, police officers signed informed consent forms that stressed confidentiality. They were guaranteed that their identities would not be disclosed and were reassured on more than one occasion that this was not an attempt "to catch them doing something wrong." Observers were quick to stress that they were "just doing research" and that they were criminal justice majors, and most officers seemed comfortable with being observed. The Savannah Police Department frequently uses student interns and allows ride-alongs for various individuals such as Citizen Police Academy participants, so this particular method of field observation was not new to many of the officers.

After completing detailed write-ups of ride-alongs, observers would submit the forms to the on-site coordinator who would then debrief the observer and elicit further explanation, if necessary.

Some encounters with citizens required no more than simple documentation. For example, when a police officer would respond to a citizen's request for information, make a victimization report, respond to a scene where no suspects were present, engage in a routine greeting to a citizen, or have a conversation with fellow officers or others, no form was completed (Mastrofski and Parks, 1990). In fact, during the first week of the study, student-observers were surprised that officers would form no suspicions during an entire shift and that

they were always responding to calls for service. Students reported disappointment when they would not be able to complete forms during a shift. As the time appeared to be wasted, students were asked to document all sustained interactions between officers and citizens, including reports of victimization. If the officer being observed acted as back-up in a situation that gave the observer a chance to view other officers' actions in detail, then the observer would also document the encounter. Observers were given an opportunity to document different types of interactions and to view officers' demeanor with all citizens, thus strengthening observational skills. For example, by documenting encounters with victims when no suspects were present, observers were sensitized toward discerning whether officers' demeanor changed significantly depending upon the type of citizen with whom the officer interacted. Encouraging students to document any "rich" exchange gave them experience in observing interactions and writing narratives. Although this resulted in "non-suspicion" actions being documented, they were used only as training for observers and were not included in the analysis. Overall, 49 officers on 132 tours were observed making 174 suspicions and 103 stops.

Observers attempted to make telephone contact with citizens who were involved in an encounter with an officer. In each case, the observer would ask permission to call the citizen later and requested a telephone number. When the citizen answered, the student-observer would read the informed consent form language to the citizen. If the citizen agreed with the language, the student would ask if he or she could sign the form for the citizen. Questions on the survey instrument elicited citizens' overall evaluations of the encounter, in addition to their perceptions, reactions, and behavior. The original purpose of these calls was to understand citizens'

perceptions, thought processes, and insights, and to attempt to ascertain what the citizen was thinking, which led to or contributed to the choices he or she made. Unfortunately, most citizens did not cooperate with the methodology and did not volunteer proper phone numbers or gave numbers that were not working. Overall, only fifteen citizens agreed to be interviewed. Fourteen of the fifteen citizens reported favorable impressions of the police and their interactions. Only one citizen reported a negative impression of the officer and interaction.

Instrumentation

Field observers used three major data collection instruments in order to gather as much relevant information as possible from a variety of sources and in diverse situations. The Officer Form was an overall evaluation of the officer's decision-making characteristics, Suspicion Forms captured information each time an incident occurred, and a Suspect Form was a compilation of data from the citizen who had an encounter with an officer. Additional documents included informed consent forms, a card detailing the language to be used for the initial contact with citizens (and hourly activity forms). The research forms are presented in Appendix A. The following discussion describes each of these forms.

Informed Consent: Each officer received an informed consent letter from the student observer explaining that a research project concerning officer interactions with citizens and police officers' impressions of their job was being conducted with the Savannah Police Department. The letter noted that involvement in the research was completely voluntary, all information would be reported in the aggregate, and if the officer chose not to participate, there would be no

negative ramifications. Each officer agreeing to participate signed the consent form, as did the student observer, and a copy of the form was given to the officer.

Officer Form: The Officer Form consisted of two sections and ten questions. Section A asked for demographic information gender, years with SPD, education, race, and age. Section B measured the officer's overall decision-making style. Observers were asked to fill out this section after they had observed the officer for a full shift, rating the importance to the officer of the appearance of suspects, their behavior, and the time and place of suspects and situations. The three response categories for each of these questions were high priority, medium priority, and not relevant. After each rating of importance, observers explained the ratings. The last two questions covered importance of information given to the officer by the dispatcher or other officers and working rules used by officers in deciding who to follow or stop.

Observers used this form as a working document when riding with one officer for a series of observations. Some observers would add to the form after each ride-along and then present a summary form at the end of ride-alongs with a particular officer. Other observers filled out several officer forms on the same officer and then completed a final form that they turned in after completing ride-alongs with the individual officer.

Suspicion Form: The suspicion form was the major document used by observers. A suspicion form was filled out each time an officer formed a suspicion or followed a suspect; thus, each form represented a single incident. This form was ten pages long and was divided into six major sections. The heading gave space for date, time of observation, precinct/shift, visibility, observer

ID, officer number,[3] and observation number. The first section regarded detailed aspects of forming suspicion and contextual characteristics. Demographic characteristics of suspects or victims, make and model of vehicles, and neighborhood assessments were noted in this section of the form. The second section consisted of questions pertaining to the officers' actions, including what the officer did, reasons given by the officer for his or her actions, and whether or not others observed these actions. In this section, the use of force was expanded to any physical force used by an officer, including come-along holds, pressure points and other strong-armed tactics. The use of handcuffs was not considered a use of force. The liberal use of coercion was used rather than the traditional use of force as the latter is such a rare event. The next section pertained to searches of vehicles or suspects. The fourth section provided space for the observers to describe in detail the interaction between the officer and suspect and included prompts relating to the officer's and suspect's general attitude/language and behavior toward each other. The officer's perception of the social status or the importance of the suspect was gathered at this point, and any appearance of disrespect by either officers or suspects was documented. The next section surveyed the officer's assessment of the demeanor and cooperation of the suspect and the result of the stop. The final section was an in-depth, three-part analysis of changes in demeanor displayed by both the officer and the suspect at the time of the initial contact, during the encounter, and after the outcome. If the situation became hostile, observers were asked to identify and explain who the first person to show hostility. Most of the questions in this form

[3] In order to ensure anonymity, observers assigned numbers to each of the officers with whom they rode. Officer names were not used on any of the suspicion forms or the officer form.

were open-ended and observers were trained to be as detailed as possible in their narrative accounts.

Language for Officers and Observers After Stop is Made: Officers were requested to ask citizens, **"**I have an observer from Armstrong Atlantic State University in the car who would like to ask you a question. Is that alright?" If the citizen agreed, the observer would state that he or she was working on a study looking at the Savannah Police Department and would like to call the citizen with a few questions concerning the interaction with the officer that day. If citizens agreed, they would give the observer their phone number. Observers kept track of refusals.

When observers were allowed to approach citizens, most of the time they declined to be contacted. The question asked most often by the citizen was whether the observer was an attorney. When informed that the observer was not an attorney, the citizen might refuse to cooperate. As noted earlier, if the citizen provided a phone number, it might be a wrong number or one that was disconnected. There were some instances when the suspect stated he/she did not have a telephone number.

Suspect/Victim Form: When suspects (or victims in some cases) could be contacted, a survey instrument similar to the suspicion instrument was utilized. The first page was the informed consent form, explaining the purpose of the call and seeking the voluntary participation of the citizen. The rest of the form asked for the citizen's account of the encounter with the police officer, including the reasons given by the officer for the stop, and the language, attitude, and behavior of the officer throughout the encounter. Citizens were asked for their perceptions regarding the social status or importance of patrol officers and how they perceived their own

status compared to the status of patrol officers. Observers asked citizens about the effect that their encounter with the police has had on their overall attitude toward the Savannah Police Department. The final section asked for assessments of the demeanor of the officer at the time of initial contact, during the encounter, and at the final outcome.

Activity Form: Students were given a one-page form on which to record hourly activity. This helped students document everything that occurred on a shift and was a way to account for shifts in which no suspicion was formed.

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Appendix I Qualitative Notes

The following comments are some of the more significant or interesting remarks that were recorded by the on-site coordinator:

"Hours of boredom followed by moments of sheer terror." White male observer in Precinct 2.

"It was so cool! That was the most fun I've had in my entire life." White female observer "with small bladder" who had been worried about getting bathroom breaks.

"I saw the car we were on the look-out for, but I didn't want to contaminate the research." White male observer explaining why he did not say anything regarding a BOLO that his officer missed.

One of the observers wrote a detailed narrative of his thoughts and perceptions of his experience. While it was not discussed in his narrative, he explained to the on-site coordinator that it was very interesting that the officers on his shift took turns providing dinner for the whole precinct. Half of the officers on patrol would break for dinner and go back to the precinct to eat together, and then the other half would do the same. In addition, the officers had "family" names and roles for each other, much like the pseudo-families in female prisons. For example, older officers with seniority played parent roles; rookies were referred to as someone's sons, and

others were "aunties" or "uncles." One lieutenant was a "mean auntie" and the "kids" would "make fun" of her. The following account is one observer's account and demonstrates how well observers can be accepted by officers they study.

"Precinct 2 covers a majority of lower-income, black neighborhoods. It has a high crime rate, and drug sales and prostitution are prevalent. Most of the officers on the 4 to midnight shift are African-American with only two white officers. Two officers are African American females. Officers were unsure of me at first, but on day 2 of my ride alongs, they came up to me and found out what I was doing. Once they began to feel at ease with me, they began to laugh and joke with me. Several even began to tell me about their policing style with little or no prompting from me.

The officer I rode with began to refer to me as his "partner" when we came up on different situations. He went from saying to others that "**I** responded to a call" to "**We** responded to a call." On the first night, my officer rendezvoused (sic) with several other officers on patrol. When he got out to talk to the others, he told me to wait in the car, saying they had "police business" to discuss. On day 2, however, when he got out of the car, he said, "Come on, you're with me." All of the officers expected me to be an active participant in their conversations.

Other officers would actually come up and tell me to get out of the car so I could observe what they were doing. They would treat me like a rookie officer and ask me how I would respond to certain situations. I felt strangely at ease with them, and once they found out that I

wanted to be a police officer, responses ranged from positive (“You would make a good cop”) to negative (“If I could do it over, I would pick ″X″). Once they knew that I was a criminal justice major interested in law enforcement, even the most ″hard core” officer began talking to me. Strangely enough to me, many suspects and complainants thought I was a detective or officer in plain clothes.

Ch. 3 Findings

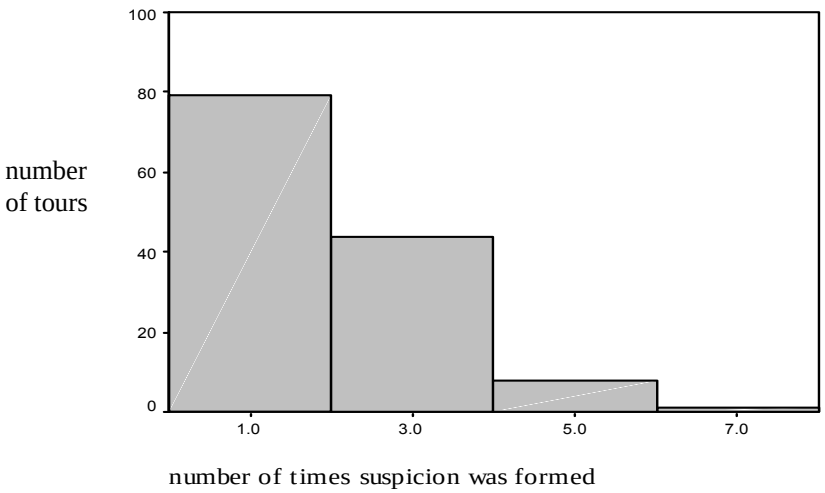
The analyses presented in this section of the report are based on the observations made during the course of this study. This report therefore outlines the results on a department-wide basis. More specific information by precinct can be found in the following Appendix. Individual precincts can develop their own culture or style of policing. A precinct that is significantly different from the others can influence our general findings and should be reviewed to determine possible explanations or reasons.

We have decided to describe the data in great detail. Rather than select and describe specific relationships, we present in this chapter, an exhaustive analysis of the data.

Description of Suspicion

Officers formed suspicion when they observed something unusual, became curious, or otherwise distrustful of an individual. During 132 tours where officers were accompanied by observers, officers formed suspicion 174 times. On average, an officer would form suspicion once ($\bar{X} = 1.32$; S.D. = 1.27) during a tour of duty (or shift). On 60 of these tours, officers did not form a suspicion. On one tour, an officer formed suspicion 7 times. This information is shown graphically in Figure 1 (below).

Figure 1. Number of Times Suspicion Was Formed by Number of Rides



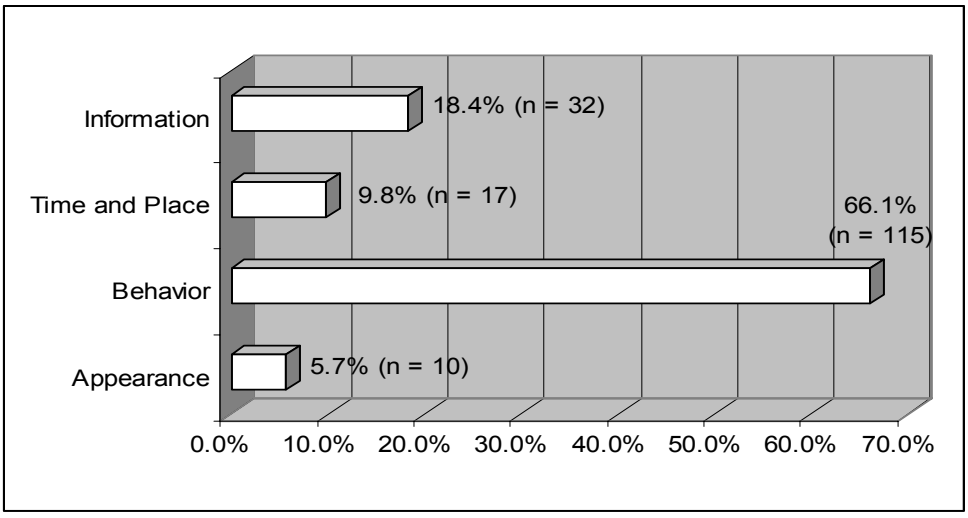
Bases for Suspicion

When an officer was curious about a citizen or became suspicious, observers asked the officer to provide them with the reason(s) for this concern. The reasons provided by observers were organized by type and coded according to the following categories: (1) appearance, (2) behavior, (3) time and place, and (4) information. "Appearance" refers to the appearance of an individual and/or vehicle, and can refer to things such as distinctive dress, indicators of class, vehicle type, color, condition, and the like. "Behavior" refers to any overt action taken by an individual or vehicle that seemed inappropriate, illegal, or bizarre. "Time and place" refers to an officer's knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours). Finally, "Information" refers to information provided by either a dispatcher or fellow officer (e.g., BOLO). As depicted in Figure 2 (below), the main reason for forming suspicion was the behavior of the suspect(s). In the overwhelming majority of cases, the officer told the observer that

the behavior of the suspect(s) was the primary reason for forming suspicion. An analysis of the observers' descriptions of behavior revealed that the most likely behavioral reason for forming suspicion of an individual/vehicle was a traffic violation (e.g., running a red light, driving with expired plates).

More than 18% of the suspicions were stimulated by information provided by either a dispatcher or fellow officer (see Figure 2). This information usually involved "Be on the Lookout" bulletins, or other information provided by the department or fellow officers concerning specific characteristics of suspects of crimes or vehicles thought to be related to suspected crimes. An analysis of the observers' descriptions of the types of information they used showed that the most likely types of information used for forming suspicion of an individual/vehicle was descriptions of personal characteristics, clothing, or descriptions of vehicles that were either stolen or thought to be used in a crime.

Figure 2. Main Reason for Forming Suspicion



Nearly ten percent of the reasons given for becoming suspicious of a person were related to time and place (see Figure 2). These cases involved an officer drawing on his or her knowledge of a particular location (e.g., park, commercial area) and what activities

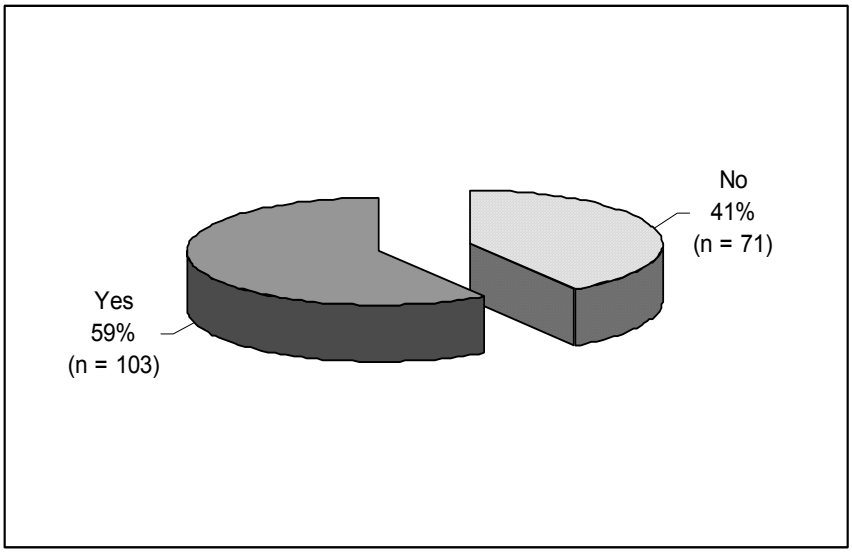
should or should not be expected there after a particular time (e.g., after hours). An analysis of the observers' descriptions of the situations which led officers to become suspicious revealed a wide variety of situations, including a car parked near a school in the woods at night, a car driving slowly in a warehouse district late at night, passengers in a car who do not match the ethnicity of the neighborhood they are driving in (especially at night).

Finally, nearly six percent of the reasons given by the officers for becoming suspicious were related to the appearance of the person(s) (see Figure 2). These indicators included distinctive dress, indicators of class, vehicle type, color, and condition. An analysis of the observers' descriptions of which characteristics of individuals or vehicles led officers to become suspicious revealed characteristics such as vehicles with heavily tinted windows, dirty or damaged vehicles, or individuals wearing gang colors or looking strung out like a drug addict.

Description of Stops

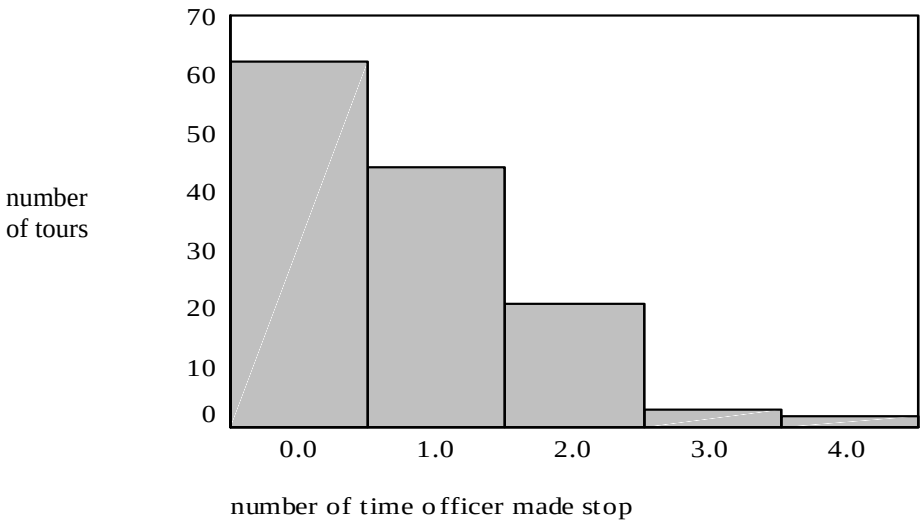
It is important to note that "forming suspicion" did not necessarily result in stopping an individual/vehicle. As depicted in Figure 3, officers stopped the individual/vehicle under suspicion the majority of the time. However, there were instances when officers did not make contact with the individual(s) under suspicion. In cases where no stop was made, the officer's continued observation of the suspect(s) convinced him/her that the original concern was unwarranted.

Figure 3. Number of Times Suspicion Resulted in Person/Vehicle Stop



Given that officers formed suspicion 174 times (see Figure 1) and that, in this study, officers made a total of 103 stops we can calculate that officers made an average of less than one stop (X = .78; S.D. = .90) per ride on the basis of suspicion. Figure 4 (below) provides a graphic depiction of the number of stops officers made per tour in this study.

Figure 4. Number of Times Officer Made Stop Based on Suspicion



As the previous sections outline, there are two units of analysis in this study: (1) when an officer formed suspicion and (2) when an officer made a stop based on

suspicion. In the following sections, we review suspicion in relation to the characteristics of areas patrolled, the persons encountered, and days and times, and undertake an analysis according to each of these units.

Characteristics of the Areas in Which Suspicion Was Formed/Stops Were Made

Officers were asked for their perceptions of the neighborhoods in which suspicion was formed or stops were made. As shown in Table 1 (below), slightly more than one-half of the time, suspicion was formed in residential areas. Suspicion was formed less often in commercial areas, secluded areas, and "other" (most often a combination of residential and commercial areas) areas. Observers queried officers regarding their perceptions of the locations in which they formed suspicion. In particular, observers asked officers if they believed the area in which they formed suspicion was a "trouble" spot (i.e., usually a high crime or drug area). As shown in Table 2 (below), most often suspicion was formed in areas *not* considered to troublesome or problematic by officers. Finally, officers were also asked for their opinion regarding the predominant racial makeup of the area in which they formed suspicion. Figure 5 (below) provides the results of officer assessments of the areas in which they formed suspicion. The majority of suspicions were formed in predominantly African-American areas of Savannah. A very small number of cases involved suspicions formed in primarily Anglo areas of town.

While most suspicions were formed in residential areas, the greatest percentage of stops occurred in commercial areas (see Table 1). The majority of the time, officers made stops of individuals/vehicles in areas not considered particularly problematic (see Table 2). Finally, the racial makeup of areas in which stops were made (see Figure 6)

was relatively similar to those in which suspicion was formed: the majority of suspicions formed and stops made occurred in predominantly African-American areas of Savannah.

Table 1. Type of Area

	Suspicion Formed		Stop Made	
	N	**%**	**N**	**%**
Residential	89	51.1	41	39.8
Commercial	71	40.8	51	49.5
Secluded	4	2.3	3	2.9
Other	10	5.7	8	7.8
Total	174	100.0	103	100.0

Table 2. Officer Indicated Area Was a Trouble Spot

	Suspicion Formed		Stop Made	
	N	**%**	**N**	**%**
No	101	59.4	54	54.5
Yes	69	40.6	45	45.5
Total	170	100.0	99	100.0

Figure 5. Racial Makeup of Areas in Which Suspicion Was Formed

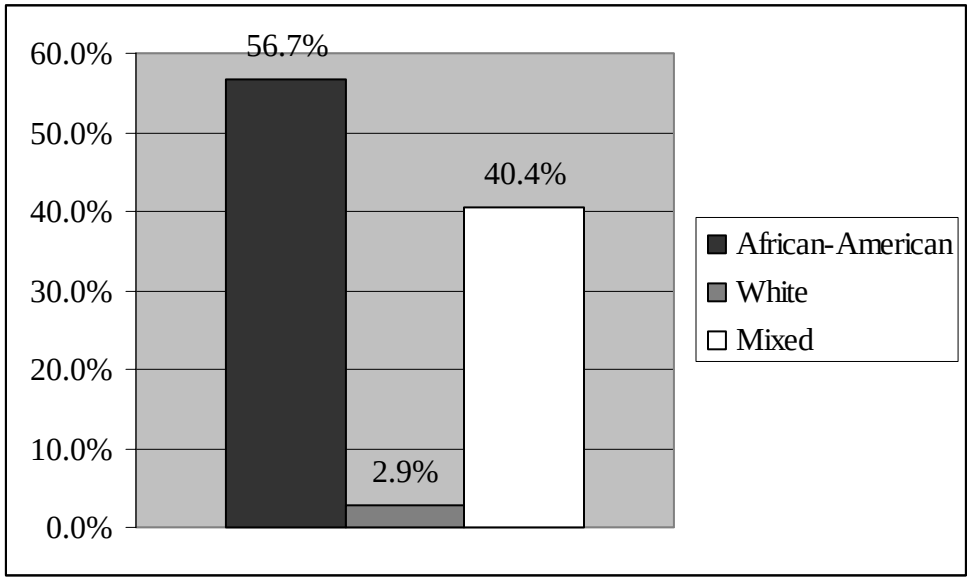
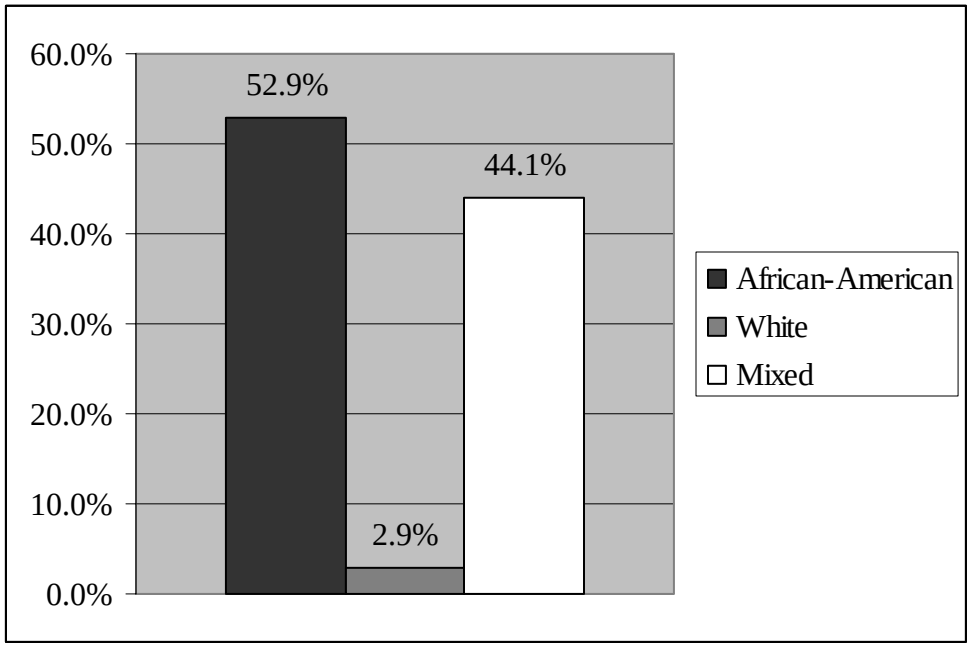


Figure 6. Racial Makeup of Areas in Which Stops Were Made



Characteristics of the Individuals about Whom Suspicion Was Formed/Who Were Stopped

Whenever an officer formed suspicion of an individual or vehicle, observers recorded information about the target. Other than the variable of class, characteristics of citizens were recorded according to observers' perceptions. However, the observers often would confirm their perceptions by asking officers about the target. For instance, observers would ask the officer if s/he was able to estimate or determine the race and age of the suspect. The observer would provide the officers' best estimate if no data, such as a driver's license, were available. To assess a suspect's class, observers were trained to ask officers for their opinion of the socioeconomic status of the individual with whom they had come into contact. Observers then probed to determine what factors the officer was taking into account when making his/her assessment. Finally, officers were also asked whether they considered the suspect to be from the same social class, a lower social class, or higher social class as the officer.

Tables 3 through 8 (below) provide an indication of the demographic characteristics of the primary individual about whom officers formed suspicion or who was stopped by the police. In the majority of cases, individuals were driving vehicles at the time suspicion was formed or stops were made (70% and 73.8%, respectively). The majority of persons who aroused the suspicion of officers or who were stopped by police were male (see Table 3), minority group members (see Table 4), and averaged thirty-two years of age (see Table 5). However, Blacks constituted a slightly higher percentage of suspicions (71.0%) than stops (68.9%), while whites had the opposite pattern (29.0 % of the suspicions and 31.1 % of the stops). Tables 6 through 8 report information only on those citizens who were stopped as the officers could not determine this specific information when forming suspicion. Table 6 presents officers' assessments of the social status or class of the primary individual about whom s/he stopped. As this table indicates, officers most often rated the person as having middle-class status. A review of explanations provided by officers indicated that officers relied on a variety of cues to make this assessment, such as individual's manner of speech, dress, the area of town in which s/he resided, or the condition, make, and/or model of the vehicle s/he was driving. Table 7 provides the results of officers' assessments as to whether the suspect was of a lower class, the same class, or a higher class than them. In the majority of cases, officers assessed the citizens to be of the same socioeconomic status.[1] Finally, a small number of

[1] It should be noted that there were many missing cases for suspect class. Many officers were reluctant to provide an assessment of the suspect's socioeconomic status. Officers were even more reluctant to indicate whether they felt the suspect's class to be lower, higher, or the same as their own.

suspects was under the influence of alcohol or drugs at the time police became suspicious of them or when they were stopped (see Table 8).

Table 3. Suspect Gender

	Suspicion Formed		Stop Made	
	N	**%**	**N**	**%**
Male	116	73.9	71	68.9
Female	41	26.1	32	31.1
Total	157	100.0	103	100.0

Table 4. Suspect Race

	Suspicion Formed		Stop Made	
	N	**%**	**N**	**%**
Black	110	71.0	71	68.9
White	44	29.0	32	31.1
Total	155	100.0	103	100.0

Table 5. Average Age of Suspect

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Suspicion Formed					
Age	93	10.0	65.0	31.90	13.89
Stop Made					
Age	78	10.0	65.0	32.24	14.34

Table 6. Suspect Class

	Stop Made	
	N	**%**
Low	28	32.6
Medium	54	62.8
High	4	4.7

Total	86	100.0

Table 7. Suspect Class Relative to Officer Class

	Stop Made	
	N	**%**
Lower	24	31.6
Same	49	64.5
Higher	3	3.9
Total	76	100.0

Table 8. Suspect Was Under the Influence of Alcohol/Drugs

	Stop Made	
	N	**%**
No	86	87.8
Yes	12	12.2
Total	98	100.0

Characteristics of Day and Time Suspicion Was Formed/Stops Were Made

Observers documented the time whenever officers became suspicious of or made stops of individuals. Later, using the U.S. Naval Observatory Astronomical Applications Department Data Services' sunrise/sunset calculator, the time was coded to reflect whether it was prior to or after sunset. This measure provides an approximation of the officer's ability to make out certain suspect characteristics (e.g., race, gender, age) prior to making a stop of the individual. The data revealed that a little over one-third of suspicions were formed when it was dark out (35.8%; n = 62). The date of the tour was also noted. Dates were then classified according to whether they fell on a day during the

week (Sun.–Thurs.) or weekend (Fri.–Sat.). In this study, the majority of suspicions were formed during the week rather than weekend (64.9%; n = 113) (see Figure 7). The results were largely concordant regarding the time and day that stops occurred (see Figure 8), although stops were slightly more likely to occur on a weekday compared to suspicions.

Figure 7. Day and Time of Suspicion

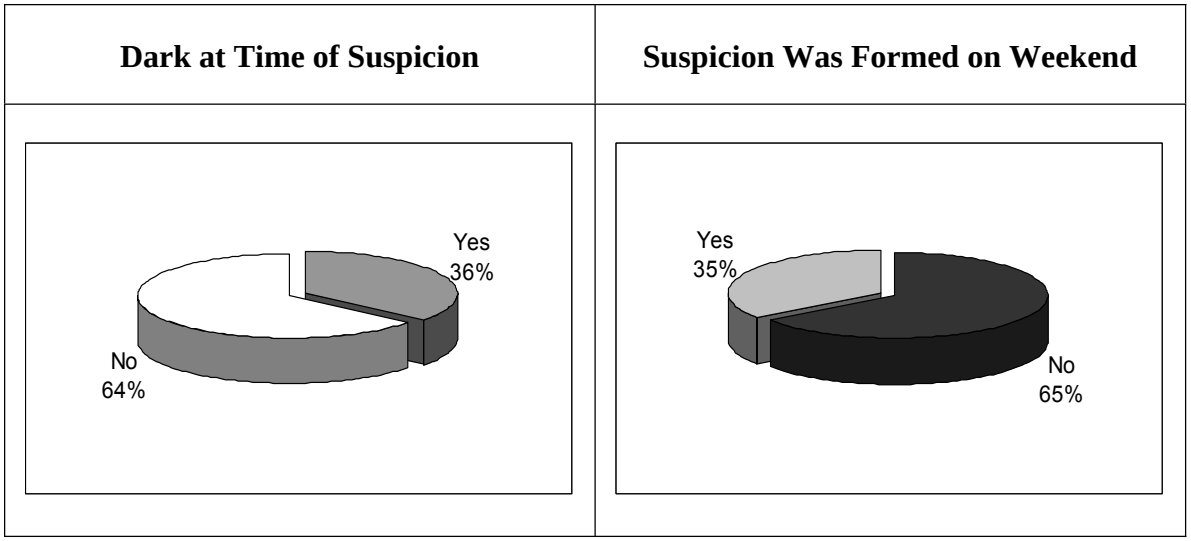
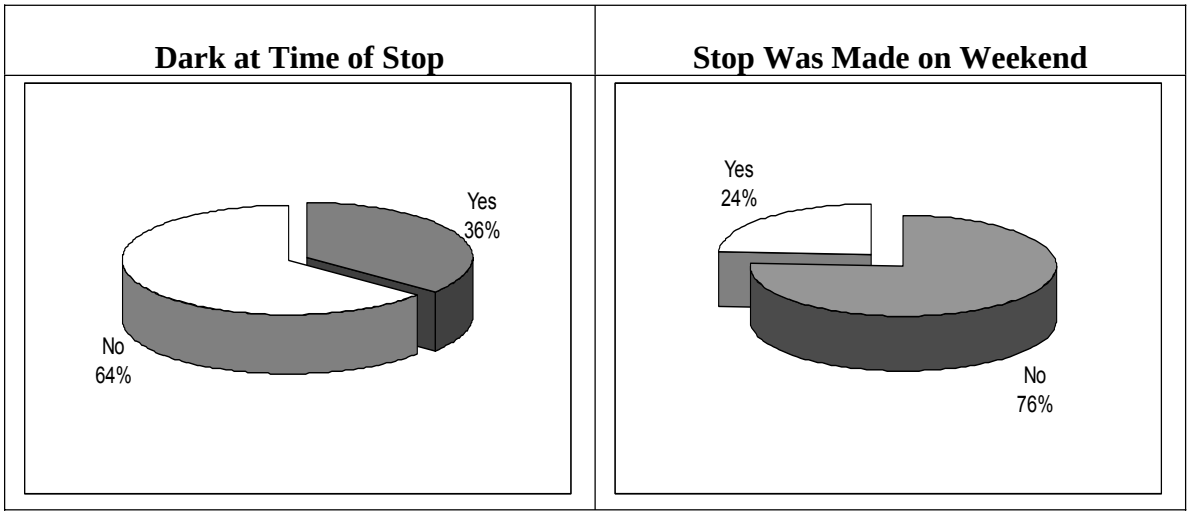


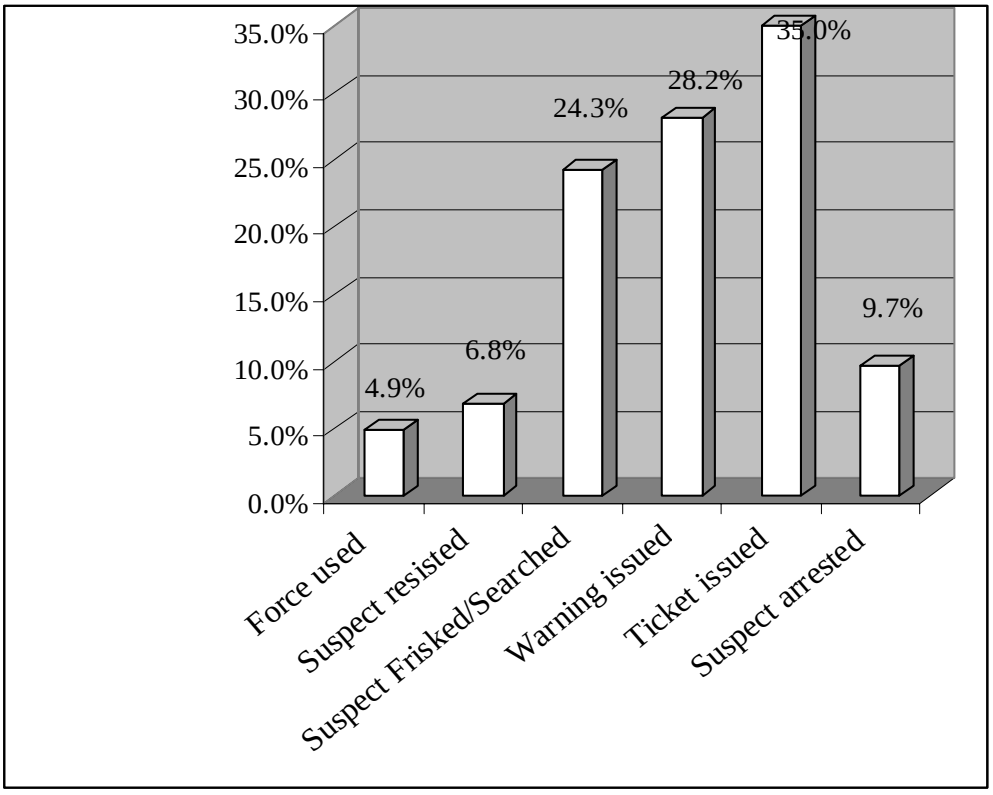
Figure 8. Day and Time of Stop



Outcomes of Stops

This study collected limited data on the results of the officers' stop. Figure 9 (below) provides an indication of whether the officer used physical coercion or force against the suspect, the suspect offered resistance to the police, the police issued a warning or ticket, the suspect was frisked or searched, and/or police arrested the suspect during one of the 103 stops. Here, force is defined as the use of any physical coercion and includes such tactics as "come along holds," and the use of pressure points (but not the use of handcuffs). This liberal definition is used as higher levels of force are extremely rare. As this figure indicates, the most common outcomes were either the issuance of a ticket (35.0%; n = 36) or a warning (28.2%; n = 29).

Figure 9. Outcomes of Stops Based on Suspicion



It was suspected that there might be a high degree of correlation between the various outcome measures described above. In order to explore this possibility, correlational analyses were performed on the data. The results of these analyses are presented in Table 9 (below). As this show table shows, there were significant relationships between a suspect resisting, being frisked or searched, arrested, and the officer having to resort to the use of force. On the other hand, these outcomes were not correlated with the suspect receiving a warning or a ticket—indicating that these types of encounters are likely quite different in nature.

Table 9. Correlations between Outcome Variables

	Suspect Resisted	Suspect Frisked	Force Was Used	Suspect Searched	Suspect Issued Warning	Suspect Issued Ticket	Suspect Arrested
Suspect Resisted	1.000						
Suspect Frisked	.476***	1.000					
Force Was Used	.836***	.398***	1.000				
Suspect Searched	.281**	.611***	.214*	1.000			
Suspect Issued Warning	-.171	-.157	-.143	-.149	1.0000		
Suspect Issued Ticket	-.119	-.087	-.168	.140	-.375***	1.000	
Suspect Arrested	.563***	.579***	.536***	.629***	-.135	.032	1.000

- $p < .05$; ** $P < .01$; *** $p < .001$

Suspect Resistance and Outcome

It is instructive to get a closer look at the specific outcome variables that are significantly related to suspect resistance: being frisked or patted down, the officer using force on the suspect, searching the vehicle, and arresting the suspect. The data in Table 9a, indicate that only 19% of the suspects who offer no resistance were frisked or patted down. However, 100% of the suspects who resisted were frisked.

Table 9a. Breakdown of Suspects Who Resisted on Officer Conducted Patdown of Suspect.

	No Patdown	Patdown	Total
No Resistance	77 (81%)	18 (19%)	95 (100%)
Resistance	-----	7 (100%)	7 (100%)
Total	77 (76%)	25 (24%)	102 (100%)

Significance Level = .000

Further, suspects who resisted had force used against them 71% of the time, while none of the suspects who complied with the officer's demands had force used against them (see Table 9b).

Table 9b. Breakdown of Suspects Who Resisted on Officer Use of Force on Suspect.

	No Force	Force Used	Total
No Resistance	95 (100%)	-----	95 (100%)
Resistance	2 (29%)	5 (71%)	7 (100%)
Total	97 (95%)	5 (5%)	102 (100%)

Significance Level = .000

Only 8% of the suspects who offered no resistance had their vehicles searched, compared to vehicle searches being conducted on 43% of the resisters (see Table 9c). Finally, in Table 9d, the data indicate that only 5% of the suspects who did not resist were arrested, compared to 71% of the resisting suspects getting arrested (see Table 9d).

Table 9c. Breakdown of Suspects Who Resisted on Officer Searched Vehicle.

	No Search	Searched Vehicle	Total
No Resistance	87 (92%)	8 (8%)	95 (100%)
Resistance	4 (57%)	3 (43%)	7 (100%)
Total	91 (89%)	11 (11%)	102 (100%)

Significance Level = .005

Table 9d. Breakdown of Suspects Who Resisted on Officer Arrested Suspect.

	No Arrest	Suspect Arrested	Total
No Resistance	90 (95%)	5 (5%)	95 (100%)
Resistance	2 (29%)	5 (71%)	7 (100%)
Total	92 (90%)	10 (10%)	102 (100%)

Significance Level = .000

A question of interest when analyzing the outcome of police stops concerns whether the presence of onlookers affects the officer's behavior or the outcome of the

stop. There were onlookers for 50 of the 102 stops observed in this study. Most of the onlookers were citizens who where just passing by during the stop, some who stopped to see what was happening, and others who knew the suspects. In a few cases, the onlookers were other police officers. In Table 9e, correlations were computed on "whether the stop was visible to others" and the various outcome variables. Two of the outcome variables were significantly correlated to the visibility of the stop: suspect frisked and suspect arrested. It is interesting that both are positive correlations, signifying that when the stop is visible to others, there is a greater likelihood of the suspect being frisked by the police and of being arrested (see Table 9e).

Table 9e. Correlations between "Stop Being Visible to Others" and Outcome Variables

	Suspect Resisted	**Suspect Frisked**	**Force Was Used**	**Suspect Issued Warning**	**Suspect Issued Ticket**	**Suspect Arrested**
Stop visible to others?	.120	.216*	.139	-.016	.049	.268**

*p < .05; ** P < .01

More specific breakdowns on the two significant correlations indicated that stops visible to others resulted in suspects being patted down 34% of the time, more than twice the percentage for stops in which there were no onlookers (see Table 9f). Further, only 2% of the stops not visible to others resulted in the suspect being arrested, while arrests were made in 18% of the stops which were visible to others (see Table 9g). Apparently, when stops are visible to others, officers may feel more pressure to respond with patdowns and arrests than when there are no onlookers present.

Table 9f. Breakdown of Stops Visible to Others on Officer Conducted Patdown of Suspect.

	No Patdown	Patdown	Total
Not Visible to Others	44 (85%)	8 (15%)	52 (100%)
Stop Visible to Others	33 (66%)	17 (34%)	50 (100%)
Total	77 (76%)	25 (24%)	102 (100%)

Significance Level = .025

Table 9g. Breakdown of Stops Visible to Others on Officer Arrested Suspect.

	No Arrest	Suspect Arrested	Total
Not Visible to Others	50 (98%)	1 (2%)	51 (100%)
Stop Visible to Others	41 (82%)	9 (18%)	50 (100%)
Total	91 (90%)	10 (10%)	101 (100%)

Significance Level = .007

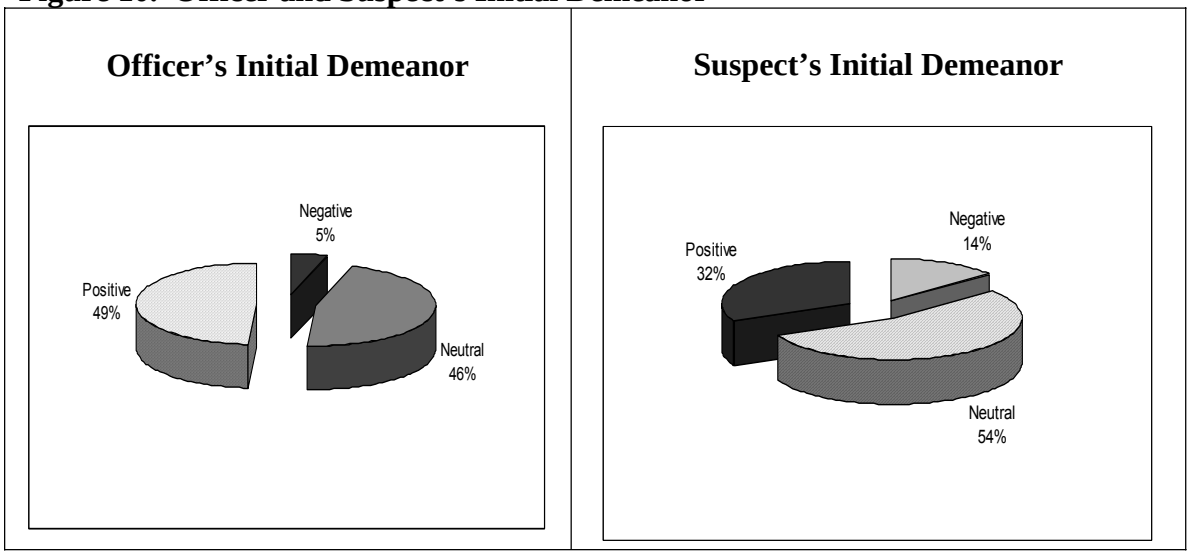
Another outcome of interest was the nature of the interaction between the police officer and primary suspect. Observers collected detailed information on the character of the encounter, such as suspect and officer demeanor at the beginning and end of an encounter, whether either actor was disrespectful toward the other during the course of the encounter, who displayed disrespect first, and the nature or "cause" of this disrespect. Information about the nature of the interaction between the officer and primary suspect is discussed under the subheadings of demeanor and disrespect.

Demeanor

Observers recorded the demeanor of suspects and officers at various points during the encounter. Figure 10 (below) depicts the demeanor of officers and suspects at the beginning of encounters. Officers acted more positively toward suspects than suspects did towards officers. While only 5% (n = 5) of officers had a negative initial demeanor, 14% (n = 14) of suspects were negative at the beginning of the encounter with the police. Next, observers noted whether either the demeanor of police officers or suspects changed

during the course of the encounter. Figure 11 (below) demonstrates that suspect and officer demeanor changed at approximately the same rate during their interaction; in roughly one-fourth of all cases, the officer and suspect changed their demeanor during the course of the encounter.

Figure 10. Officer and Suspect's Initial Demeanor



Figures 12 and 13 (below) provide graphic representations of the manner in which officer and suspect demeanor changed during the course of their interaction. Figure 12 provides an indication of the nature of demeanor change for officers and reveals that the demeanor of officers improved (i.e., negative to positive, negative to neutral, neutral to positive) in half of the cases (50%; n = 11). In the remaining fifty-percent of cases (n = 11), officer demeanor changed for the worse (i.e., neutral to negative, positive to negative, positive to neutral).

Figure 11. Officer/Suspect Demeanor Changed During Encounter

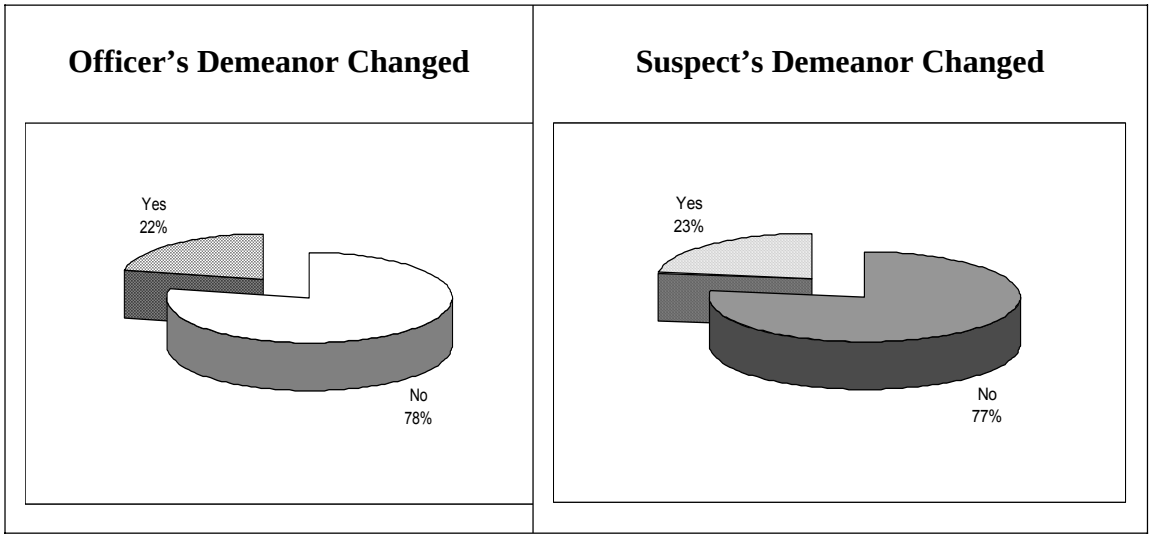
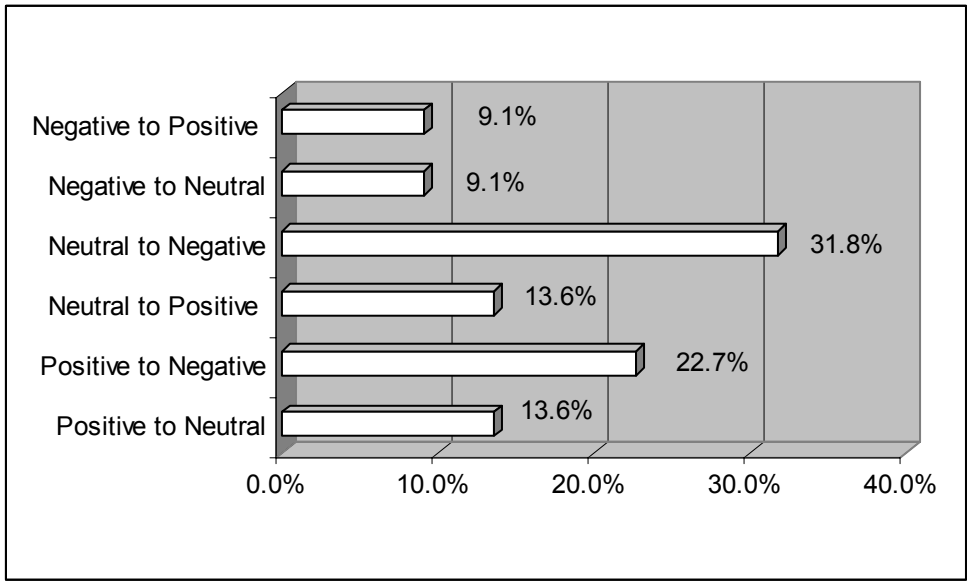


Figure 12. Nature of Officers' Demeanor Change



The nature of suspect's change in demeanor was also evenly divided between changes for the better and for the worse. In just over half of encounters (52%; n = 12), suspects' attitudes improved as their interaction with officers progressed, while in the remaining 48% of cases (n = 11) the demeanor of suspects worsened.

Figure 13. Nature of Suspects' Demeanor Change

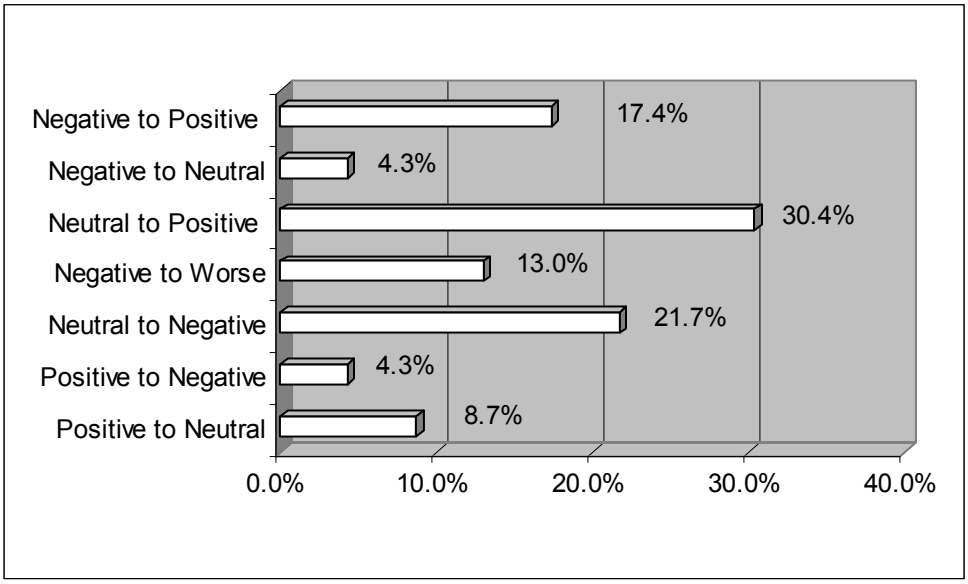


Figure 14. Officer and Suspect's Final Demeanor

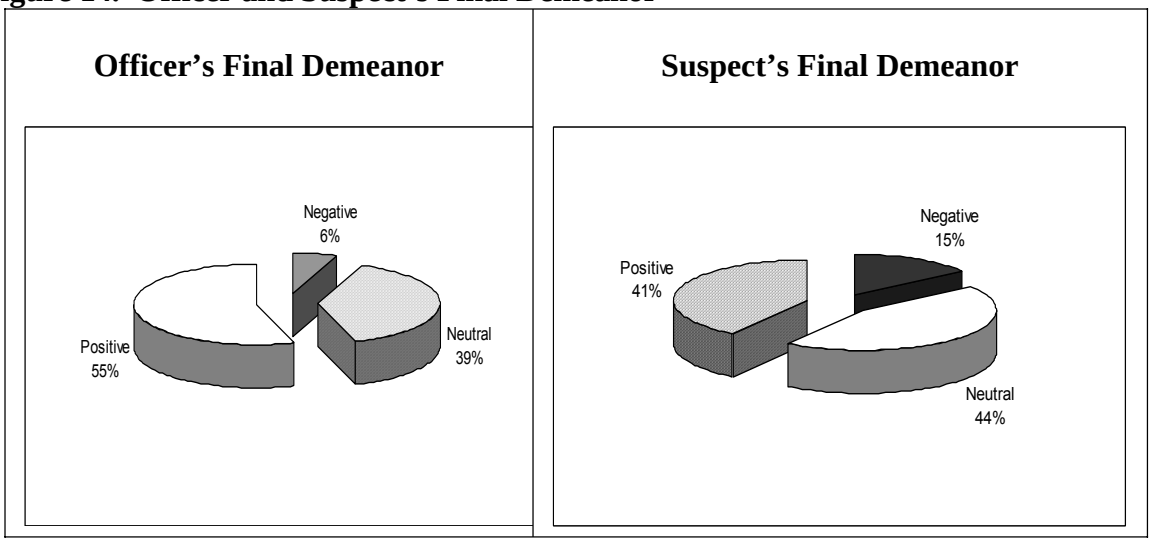


Figure 14 (above) depicts the demeanor of officers and suspects at the end of encounters. Officers tended to hold more positive attitudes toward suspects than vice versa. Over half (55%; n = 56) of the officers had a positive final demeanor, 39% (n = 40) were neutral toward suspects, and a small percentage (6%; n = 6) had a negative demeanor at the end of the encounter. In contrast, only 41% (n = 41) of suspects had a positive demeanor at the end of their encounter with the police. A slightly larger

percentage (44%; n = 45) was neutral toward officers, and 15% (n = 15) of suspects had a negative demeanor at the conclusion of their encounter with the police.

In order to better understand the reasons behind the change in demeanor of suspects and officers, observers were instructed to provide written descriptions of any changes in demeanor from the beginning to end of encounters. Table 10 (below) provides a sampling of the descriptions recorded by observers. Of these descriptions, perhaps most notable are observers' descriptions of the change in officers' demeanors. Regardless of whether officers' demeanors changed for the better or worse, officers overwhelmingly appeared to be responding to the attitude/demeanor displayed by the suspect.

Table 10. Descriptions of Officer and Suspect Demeanor Change during Encounter

	Descriptions of *Officer* Demeanor Change
Demeanor Improved by End of Encounter	• Officer referred more than once to how polite and respectful she was • By end of encounter, officer and suspect were talking about boxing • Once woman started talking, police officer calmed down • Officer was happy the driver was nice and polite (he said driver was actually thankful about being told about tag) • Officer relaxed after more contact with car occupants • Officer became friendlier as encounter went on • Officer got nicer as suspect got more cooperative • Officer shared laugh with suspect, talked about more than traffic stop • Pleased suspect was cooperative • Realized driver was just scared; driver was polite and cooperative
Demeanor Worsened by End of Encounter	• After suspects became hostile, officer became more stern • Officer became impatient and agitated with man • Officer became more loud and serious when suspect didn't immediately comply • Officer abandoned attempts to be pleasant and was just impersonal • When driver was an ass, the officer stopped trying to be nice and just issued ticket

	Descriptions of *Suspect* Demeanor Change
Demeanor Improved by End of Encounter	• At first individual was defensive, but then said he understood and didn't argue • Suspect calmed down during encounter, was happy she only got warning • Even after being put in car, suspect came out smiling, asking questions, friendly • She was happy she only got a warning • She was happy/relieved she didn't get a ticket • Suspect got more cooperative after he realized he needed to comply • Woman seemed relieved she wasn't being pulled over for something else • He shared a laugh with the officer and talked about more than the stop • Suspect was confused until he saw his tag was actually gone, then lightened up • He was uneasy/offended at first, but talking to officer at end of encounter about boxing
Demeanor Worsened by End of Encounter	• Woman became hostile after she got the ticket • Suspect became more belligerent toward officers • At first, individual was cooperative, then mad/abusive, neutral by end of encounter • Suspect got angry and started cussing after he was told he'd be there awhile • Suspect rolled her eyes and shook her head (showed non-verbal negative attitude).

In addition to providing a description of the nature of the change in demeanor among officers and suspects in this study, observers were also asked to document whether there was a specific point when the officer lost the cooperation of the suspect under observation. Similarly, they were asked to identify whether when the suspects' behavior had a negative impact on the officer. In cases when either was true, observers were asked to describe the circumstances in narrative form.

Figure 15 (below) indicates that officers did something to negatively impact the behavior of the suspect in a little over ten percent (11%; n = 11) of cases. In these cases, observers were asked to describe the action(s) officers took to affect suspects' behavior. Some actions taken by officers are described below:

- Officer corrected woman and said she had run red (not yellow) light
- Gave her ticket
- Reacted negatively after continually interrupted by suspect
- Officer searched vehicle, found drugs, and arrested suspect
- Stopped her
- Stopped man
- Told suspect he'd have to wait there awhile
- Told suspect he would have to place him in back seat of squad car
- Tried to stop individual (and had to chase and fight him)
- Wanted to question suspect

It is impossible to determine why the citizens became upset with the officers and whether the citizens were reacting to the officers' actions or their own plight.

Figure 15. Officer Did Something to Negatively Impact Behavior of Suspect

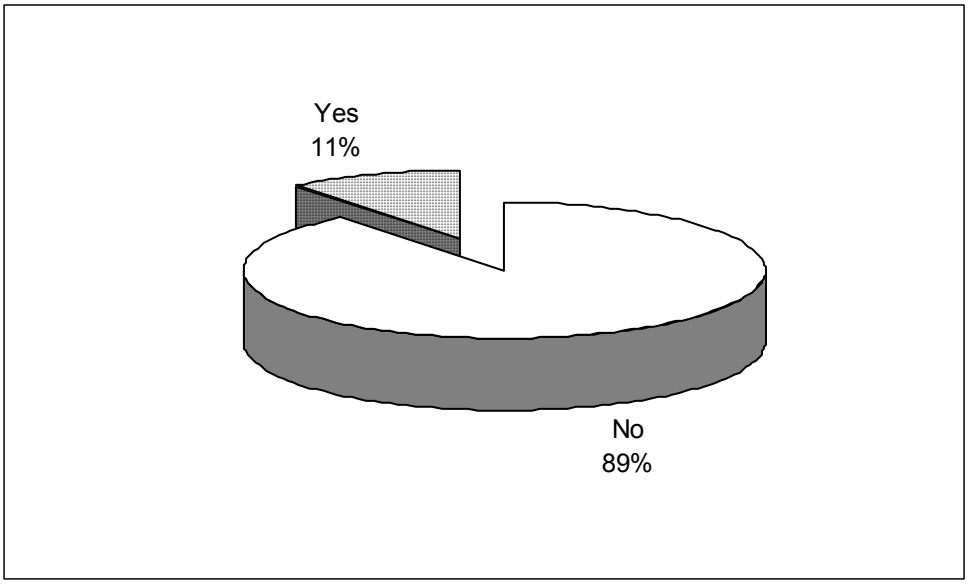
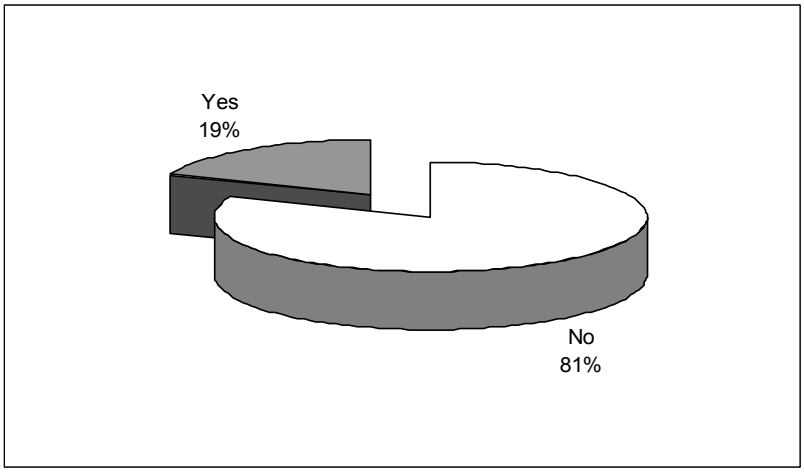


Figure 16 (below) provides an indication of the frequency with which suspects did something that negatively impacted on the behavior of officers in this study. As this figure demonstrates, suspects took action(s) that had a negative influence on the behavior

officers in this study at nearly twice the rate than did officers toward suspects. In almost one-fifth (19%; n = 19) of encounters between officers and suspects in this study, the suspect took an action that negatively impacted the officer's behavior.

Figure 16. Suspect Did Something to Negatively Impact Behavior of Officer



Again, observers were asked to provide a narrative description of the actions taken by suspects that led to this outcome. Examples of the descriptions provided by observers are found below:

- Suspect acted suspicious, hesitant, reluctant
- Argued with officer, saying light was yellow not red
- Didn't roll window down all the way, and only talked through the back window (offered no explanation for behavior)
- Failure to immediately pull over, didn't put on seat belt even after getting ticket for it
- Suspect ran
- Individual was scared, so stopped in middle of road, which made officer think he was going to run
- Suspect involved police in chase
- Suspect jumped out of vehicle in order to tell police officer his fiancee was a cop
- Individual kept interrupting officer
- He lied to officer
- Man refused help, frustrated officer
- Man ran from officers, fought with them, was verbally abusive, spit at officers
- Suspect resisted arrest

- Suspect started cursing, said he would get a lawyer to stop the harassment
- Suspect was being uncooperative
- Man threatened officer with father's supposed influence
- Man tried to explain and get out of ticket
- Suspect was offended because he was stopped and asked questions about his activities
- Individual would not respond to officer

Unfortunately, it was not possible to determine why the citizens or police officers responded to each other's actions, and whether those actions and reactions were justified.

Disrespect.

Information on disrespect was also collected regarding the police/citizen encounter. While assessments of officer and suspect demeanor were *overall* assessments of the attitudes of the suspects and officers at various points during the encounter, disrespect referred to particular incidents. In other words, observers were asked to note if either the officer or suspect displayed disrespect, either in words or actions, toward the other during the course of their interaction. Examples of verbal disrespect would include cussing, swearing, or insulting. Disrespect might also be displayed through actions (e.g., rolling eyes, walking away while being spoken to). Some examples of disrespect exhibited by suspects in this study are presented in Table 11.

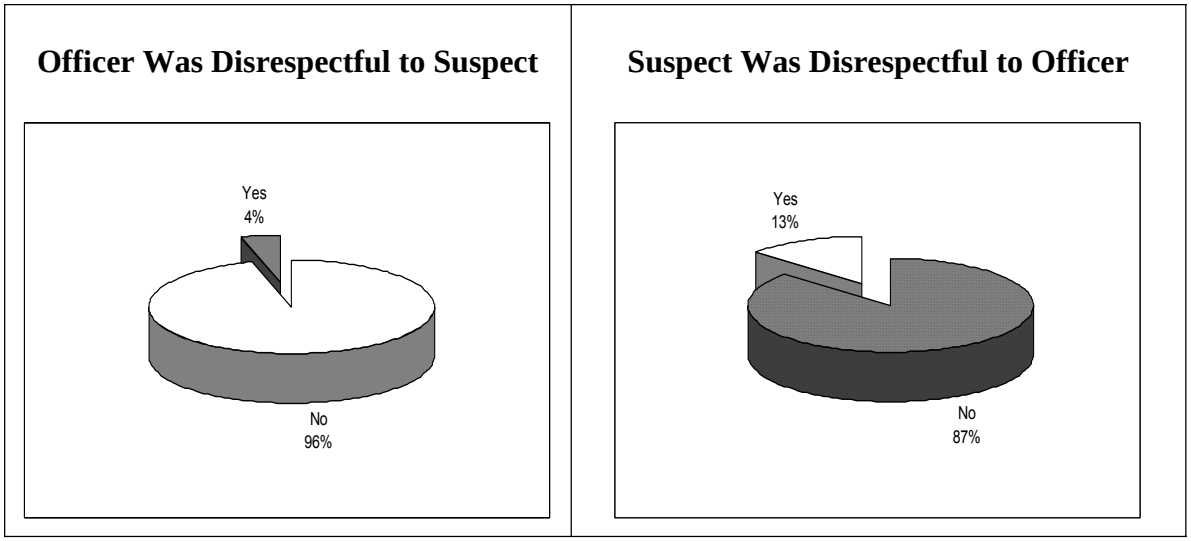
Table 11. Examples of Suspect Disrespect

Disrespectful Language	• Argumentative, told officer to stop harassing him • Cussing, loud voice • Derogatory comments (suspect told officer to "quit fucking with niggers in the hood") • Started cursing while talking to officers • Threatened officer • Verbally abusive toward officers
	• Ignored officer (would not speak to him) because he was mad about being pulled over

Disrespectful Behavior	• Kept interrupting officer • Led police on foot chase • Refusal to follow orders, turned back to officer • Refused to let other officer arrest him; started to walk away • Would not stop to talk to police officer initially, didn't follow instructions (e.g., taking hands out of pockets)

As indicated in Figure 17 (below), very few officers (4.4%; n = 4) were disrespectful toward the person they stopped. Of the four cases where an officer was disrespectful to the citizen, only one was assessed as being unprovoked; in the remaining instances, officers were reacting to disrespect exhibited by the citizen. While the overall percentage of suspects who displayed disrespect to the police was also relatively low, suspects were disrespectful at over twice the rate (13.2%; n = 12) as officers.

Figure 17. Displays of Disrespect between Officer and Suspect



While descriptive information of police-citizen encounters based on suspicion is useful, it is also important to examine the factors that are associated with the decision to stop a suspected individual. In the following section of this report, we provide the results

of bivariate analyses of the factors associated with the decision to stop a suspected individual/vehicle, as well as the factors associated with the results (e.g., use of force, suspect resistance) and nature of encounters (e.g., demeanor, disrespect) outlined in this study.

Factors Associated with the Decision to Stop a Suspected Individual/Vehicle

As shown in Figure 3, when officers formed suspicion, they also tended to initiate a stop of the individual/vehicle (59%). Table 12 presents the correlations between the decision to stop an individual/vehicle and many of the variables discussed in the previous sections of this report. These variables have been categorized as, characteristics of the area in which suspicion was formed, characteristics of the day and time when suspicion was formed, characteristics of the suspect, characteristics of the suspicion, and officer characteristics.

A total of eight factors was significantly associated with the likelihood that an officer would make a stop based on suspicion. Two characteristics of the area in which suspicion was formed were found to be significant. When the area in which the officer became suspicion of an individual was commercial, the officer was more likely to stop the individual. In contrast, officers were less likely to make stops when they formed suspicion in residential areas. One characteristic of the day and time when suspicion was formed was significantly related to the likelihood that officers would make a stop. When the suspicion was formed on a weekend day versus a day during the week, the officers were significantly less likely to make a stop based on suspicion. This makes sense; given that workloads are higher on weekends, thus reducing the time officers have available to do anything but respond to radio calls for service. This pattern seems to reflect the shift

patterns and workloads of officers: it would be logical to expect more discretionary stops for suspicion at times when there are fewer calls for service.

Table 12. Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle

Variable	Correlation	Significance Level
Public	.098	
Type of Area		
Commercial	.213	**
Residential	-.273	***
Secluded	.049	
Other	.170	
Predominantly African-American	-.093	
Trouble Spot	.117	
Dark at Time of Stop	.002	
Stop Occurred on Weekend	-.272	***
Gender (male)	-.156	
Race (black)	-.063	
Age	.056	
Class	.000	
Under Influence of Alcohol/Drugs	.000	
Reason for Forming Suspicion		
Appearance	-.147	
Behavior	.393	***
Time and Place	-.199	**
Information	-.240	***
Gender (female)	-.097	
Race (white)	.094	
Age	.226	**
Tenure	.008	
Education (high school degree)	.189	*

* $p < .05$; ** $p < .01$; *** $p < .001$

None of the **suspect characteristics** examined significantly influenced the likelihood of a stop. In other words, officers were equally as likely to stop individuals whether they were male or female, African-American or white, young or old, or perceived to be of a low or high socioeconomic status. The **type of area** in which the observation was made had a significant effect on whether a stop was made by the officer (see Table 12a). Suspicions were significantly less likely to result in stops in residential areas (46% of the time) when compared to the other types of areas, which ranged from 72% to 80% of the time).

Table 12a. Breakdown of Type of Area on Decision to Stop the Vehicle.

	No	Yes	Total
Residential	48 (54%)	41 (46%)	89 (100%)
Commercial	20 (28%)	51 (72%)	71 (100%)
Secluded	1 (25%)	3 (75%)	4 (100%)
Other	2 (20%)	8 (80%)	10 (100%)
Total	71 (41%)	103 (59%)	174 (100%)

Chi Squared = .004

Stops were significantly related to whether the observation occurred **during the weekend** or not (see Table 12b). Suspicions resulted in actual stops 69% of the time during the weekdays, but only 41% of the time during the weekend (Friday and Saturday nights). Perhaps, weekend nights are far busier times for law enforcement activities and officers cannot follow up on suspicious behaviors they observe as often as during the less busy time periods.

Table 12b. Breakdown of Time of Observation on Decision to Stop the Vehicle.

	No	Yes	Total
Not Weekend	35 (31%)	78 (69%)	113 (100%)
Weekend (Fri/Sat night)	36 (59%)	25 (41%)	61 (100%)
Total	71 (41%)	103 (59%)	174 (100%)

Chi Squared = .000

The nature of the suspicion also was influential in determining the relative likelihood that an officer would make a stop (see Table 12c).

Table 12c. Breakdown of Primary Reason Officer Formed Suspicion on Decision to Stop the Vehicle.

	No	Yes	Total
Appearance	7 (70%)	3 (30%)	10 (100%)
Behavior	31 (27%)	84 (73%)	115 (100%)
Time and Place	12 (71%)	5 (29%)	17 (100%)
Specific Information	21 (66%)	11 (34%)	32 (100%)
Total	71 (41%)	103 (59%)	174 (100%)

Chi Squared = .000

Officers were significantly more likely to make stops when they had formed suspicion on the basis of the suspect's behavior (75% of the time), but significantly less likely to make a stop if they had formed suspicion on the basis of time and place (29%) or information (34%).

Finally, two officer characteristics were associated with making a stop of an individual. Older officers and officers with a high school education were significantly more likely to make stops than younger and more educated officers. Officers with a high school education made stops in 70% of the incidents that they defined as suspicious, significantly higher than the percentages for the more educated officers (see Table 12d).

Table 12d. Breakdown of Officer's Education Level on Decision to Stop the Vehicle.

	No	Yes	Total
High School Diploma	23 (30%)	53 (70%)	76 (100%)
Associate Degree	22 (48%)	24 (52%)	46 (100%)
Bachelor's Degree	21 (46%)	25 (54%)	46 (100%)
Master's Degree +	5 (83%)	1 (17%)	6 (100%)
Total	71 (41%)	103 (59%)	174 (100%)

Chi Squared = .025

The mean age of officers making stops after forming suspicion is 34.5 years, significantly older than the mean of officers forming suspicion but not making a stop (31.3) (see Table 12e).

Table 12e. Breakdown of Officer's Age on Decision to Stop the Vehicle.

	N	Mean	Standard Deviation
Did Not Stop Vehicle	70	31.3	4.48
Stopped Vehicle	102	34.5	8.02
Total	172	33.2	6.97

Significance Level = .003

Factors Associated with the Results of Stops

Table 13 presents the results of correlation analyses performed on a number of variables (e.g. characteristics of the area, time of day, characteristics of suspects and officers, and reasons for becoming suspicious) that may have an impact on the results of a stop (e.g. suspect resisted, suspect frisked, force was used, vehicle searched, suspect issued a warning, suspect issued a ticket, and suspect arrested). These analyses revealed that many of these variables were related to specific stop outcomes.

Characteristics of the Area

Characteristics of the area did not affect most of the stop outcomes, but did have an impact on whether or not the suspect was frisked. Suspects were more likely to be frisked if the area was private and when the area was residential (see Table 13a). In private locations, 67% of the stops resulted in the suspect being patted down compared to only 22% of the suspects receiving similar treatment in public locations.

Table 13a. Breakdown of Private/Public Location on "Stop Resulted in a Patdown."

	No Patdown	Patdown	Total
Private Location	2 (33%)	4 (67%)	6 (100%)
Public Location	76 (78%)	21 (22%)	97 (100%)
Total	78 (76%)	25 (24%)	103 (100%)

Chi Squared = .030

Further, 37% of the suspects stopped in residential areas were frisked, while only 12% of those stopped in commercial areas were patted down (see Table 13b). There were too few incidents in secluded and "other" areas to give a reliable percentage.

Table 13b. Breakdown of the Type of Area Observed on "Stop Resulted in a Patdown."

	No Patdown	Patdown	Total
Residential	26 (63%)	15 (37%)	41 (100%)
Commercial	45 (88%)	6 (12%)	51 (100%)
Secluded	1 (33%)	2 (67%)	3 (100%)
Other	6 (75%)	2 (25%)	8 (100%)
Total	78 (76%)	25 (24%)	103 (100%)

Chi Squared = .014

Finally, suspects stopped in commercial areas were slightly more likely to be issued a ticket (45%) than suspects stopped in residential areas (25%) (see Table 13c).

Table 13c. Breakdown of the Type of Area Observed on "Officer Issued a Ticket."

	No Ticket	Ticket	Total
Residential	30 (75%)	10 (25%)	40 (100%)
Commercial	28 (55%)	23 (45%)	51 (100%)
Secluded	3 (100%)	-----	3 (100%)
Other	5 (63%)	3 (37%)	8 (100%)
Total	66 (65%)	36 (35%)	102 (100%)

Chi Squared = .080

There were two characteristics of areas that did not make a difference on any of the stop results: the racial makeup of the area and areas the officer thought were "trouble spots." Also, neither of the time measures affected stop outcomes: stops made after dark and stops on weekend nights.

Suspect Characteristics

In terms of suspect characteristics, some were significantly correlated with the likelihood of certain outcomes, but not others. Only one suspect characteristic was not related to any of the seven outcome variables: race. This indicates that all measured

outcomes of stops were not affected by the race of the suspect. Gender was related to the likelihood of being frisked and receiving a ticket. Thirty-two percent of the male suspects were frisked, while only 6% of female suspects were patted down, resulting in a five times greater likelihood of males being frisked (see Table 13d).

Table 13d. Breakdown of Driver's Gender on "Stop Resulted in a Patdown."

	No Patdown	Patdown	Total
Males	48 (68%)	23 (32%)	71 (100%)
Females	30 (94%)	2 (6%)	32 (100%)
Total	78 (76%)	25 (24%)	103 (100%)

Chi Squared = .003

However, the figures in Table 13e indicate that females who were stopped were nearly twice as likely as males to be issued a traffic ticket (53% versus 27%).

Table 13e. Breakdown of Suspect's Gender on "Officer Issued a Ticket."

	No Ticket	Ticket	Total
Males	51 (73%)	19 (27%)	70 (100%)
Females	15 (47%)	17 (53%)	32 (100%)
Total	66 (65%)	36 (35%)	102 (100%)

Chi Squared = .011

Age was related to the likelihood of being frisked and the vehicle being searched. Younger persons were significantly more likely to be frisked or have their vehicle searched than older individuals. The average age of drivers who were patted down is 25 years, compared to an average age of 35 years for drivers not patted down (see Table 13f).

Table 13f. Breakdown of Driver's Age on "Stop Resulted in a Patdown."

	N	Mean	Standard Deviation
No Patdown	59	34.5	14.46
Patdown	19	25.2	11.65
Total	78	32.2	14.34

Significance Level = .012

There is a similar pattern for the searching of vehicles. The average age of drivers who had their vehicles searched is 22 years, while drivers who did not have their vehicles searched averaged 34 years of age (see Table 13g).

Table 13g. Breakdown of Driver's Age on "Officer Searched Vehicle."

	N	Mean	Standard Deviation
No Search	70	33.5	14.62
Search	8	21.5	2.73
Total	78	32.2	14.34

Significance Level = .024

The perceived social class of the suspect was related to only one outcome variable, but the one which is the most severe: being arrested. Stopped suspects perceived by the officer to be lower class were arrested 25% of the time, while suspects perceived to be middle class were arrested only 6% of the time (see Table 13h). Only four suspects were perceived to be in the upper class, but none of them was arrested.

Table 13h. Breakdown of Suspect's Social Class on "Officer Arrested Suspect."

	No Arrest	Arrest	Total
Perceived as Low	21 (75%)	7 (25%)	28 (100%)
Perceived as Middle	51 (94%)	3 (6%)	54 (100%)
Perceived as High	4 (100%)	----	4 (100%)
Total	76 (88%)	10 (12%)	86 (100%)

Chi Squared =.026.

The suspect characteristic most consistently related to the results of stops was whether the suspect was under the influence of alcohol or drugs at the time of the stop. When this was the case, the suspect was significantly more likely to resist the officer, to be frisked, have force used against him/her, to have their vehicle searched, and to be arrested. More specifically, suspects under the influence of alcohol or drugs were about ten times more likely to resist (33%) than suspects not under the influence (3%) (see Table 13i).

Table 13i. Breakdown of "Suspect Under the Influence of Alcohol/Drugs" on "Suspect Resisted."

	No Resistance	Suspect Resisted	Total
Not Under the Influence	83 (97%)	3 (3%)	86 (100%)
Under the Influence	8 (67%)	4 (33%)	12 (100%)
Total	91 (93%)	7 (7%)	98 (100%)

Chi Squared = .004

Further, suspects under the influence were about five times more likely to be patted down (75%) than other suspects (15%) (see Table 13j), and more than twelve times (25%) more likely to have force used against them during the encounter with the police than suspects not under the influence (2%) (see Table 13k).

Table 13j. Breakdown of "Suspect Under the Influence of Alcohol/Drugs" on "Stop Resulted in a Patdown."

	No Patdown	Patdown	Total
Not Under the Influence	73 (85%)	13 (15%)	86 (100%)
Under the Influence	3 (25%)	9 (75%)	12 (100%)
Total	76 (78%)	22 (22%)	98 (100%)

Chi Squared = .000

Table 13k. Breakdown of "Suspect Under the Influence of Alcohol/Drugs" on "Officer Used Force."

	No Force	Force	Total
Not Under the Influence	84 (98%)	2 (2%)	86 (100%)
Under the Influence	9 (75%)	3 (25%)	12 (100%)
Total	91 (95%)	5 (5%)	98 (100%)
Chi Squared = .012			

Police officers decided to search the vehicles of 50% of the suspects under the influence of alcohol or drugs, but only 5% of the vehicles of other suspects, a ten times greater likelihood.

Table 13l. Breakdown of "Suspect Under the Influence of Alcohol/Drugs" on "Officer Searched Vehicle."

	No Search	Search	Total
Not Under the Influence	82 (95%)	4 (5%)	86 (100%)
Under the Influence	6 (50%)	6 (50%)	12 (100%)
Total	88 (90%)	10 (10%)	98 (100%)
Chi Squared = .000			

Finally, the suspects under the influence of alcohol or drugs were fourteen times more likely to be arrested (42%) than suspects not under the influence (3%) (see Table 13m).

Table 13m. Breakdown of "Suspect Under the Influence of Alcohol/Drugs" on "Officer Arrested Suspect."

	No Arrest	Arrest	Total
Not Under the Influence	83 (97%)	3 (3%)	86 (100%)
Under the Influence	7 (58%)	5 (42%)	12 (100%)
Total	90 (92%)	8 (8%)	98 (100%)
Chi Squared = .001			

Reasons for Forming Suspicion

With regard to the process of forming a suspicion, when the reason for forming suspicion was behavior (versus appearance, time and place, or information), suspects were significantly less likely to resist, have force used against them, and be frisked. On the other hand, they were significantly more likely to be issued a ticket. More specifically, only 2% of the suspects who were selected by the officer for observation because of their behavior ended up resisting the officer (See Table 13n). Compare this figure to the 45% of suspects who resisted when the officer began observing them because of specific information received by the officer about the situation. There were too few cases involving suspicion that was based on appearance or time and place to allow valid comparisons with these categories.

Table 13n. Breakdown of the Reasons the Officer Formed Suspicion on "Suspect Resisted."

	No Resistance	Resistance	Total
Appearance	3 (100%)	----	3 (100%)
Behavior	81 (98%)	2 (2%)	83 (100%)
Time and Place	5 (100%)	----	5 (100%)
Specific Information	6 (55%)	5 (45%)	11 (100%)
Total	95 (93%)	7 (7%)	102 (100%)

Chi Squared = .000

Patdowns were more likely to result when the officer had specific information (e.g. BOLO) that led them to become suspicious (82%) when compared to all the other reasons for forming suspicion (see Table 13o). Suspicions formed strictly on the behavior of the suspects only resulted in patdowns 16% of the time.

Table 13o. Breakdown of the Reasons the Officer Formed Suspicion on "Stop Resulted in a Patdown."

	No Patdown	Patdown	Total
Appearance	2 (67%)	1 (33%)	3 (100%)
Behavior	71 (85%)	13 (16%)	84 (100%)
Time and Place	3 (60%)	2 (40%)	5 (100%)
Specific Information	2 (18%)	9 (82%)	11 (100%)
Total	78 (76%)	25 (24%)	103 (100%)
Chi Squared = .000			

Officer use of force occurred most of the time when officers had specific information that led them to become suspicious (4 out of the 5 instances of force) (see Table 13p).

Table 13p. Breakdown of the Reasons the Officer Formed Suspicion on "Officer Used Force."

	No Force	Force	Total
Appearance	3 (100%)	----	3 (100%)
Behavior	82 (99%)	1 (1%)	83 (100%)
Time and Place	5 (100%)	----	5 (100%)
Specific Information	7 (64%)	4 (36%)	11 (100%)
Total	97 (95%)	5 (5%)	102 (100%)
Chi Squared = .000			

Issuing tickets, on the other hand, came mostly from suspicions formed because of the behavior of the suspects (41%) of the time and involving 34 of the 36 instances where tickets were issued.

Table 13q. Breakdown of the Reasons the Officer Formed Suspicion on "Officer Issued a Ticket."

	No Ticket	Ticket	Total
Appearance	1 (33%)	2 (67%)	3 (100%)
Behavior	49 (59%)	34 (41%)	83 (100%)
Time and Place	5 (100%)	----	5 (100%)
Specific Information	11 (100%)	----	11 (100%)
Total	66 (65%)	36 (35%)	102 (100%)
Chi Squared = .011			

Table 13r. Breakdown of the Reasons the Officer Formed Suspicion on "Officer Arrested Suspect."

	No Arrest	Arrest	Total
Appearance	3 (100%)	-----	3 (100%)
Behavior	76 (92%)	7 (8%)	83 (100%)
Time and Place	5 (100%)	----	5 (100%)
Specific Information	8 (73%)	3 (27%)	11 (100%)
Total	92 (90%)	10 (10%)	102 (100%)

Chi Squared = .184

This makes sense, since the behavior that the officer observed most often was a traffic violation. When information was the basis of suspicion, suspects were significantly more likely to resist, have force used against them, be frisked and arrested. When information was the reason that officers became suspicious of an individual, the suspect was significantly less likely to be issued a ticket.

Characteristics of the Officer

In a perfect world, where all officers are perfectly trained and follow policies and procedures exactly as specified, we would expect officer characteristics not to be much of a factor in officer decision-making. In this study, only two officer characteristics influenced the results of stops, and each influenced only one outcome. The first is the officer's race, which influenced the likelihood of suspects receiving a ticket. White officers are significantly more likely to issue tickets than their minority counterparts. More specifically, out of all the stops made by White officers, 45% ended up issuing the suspect a ticket. The same figure for non-White officers is 20% (see Table 13t). Therefore, White officers were more than twice as likely to issue tickets during their stops as were other officers.

Table 13t. Breakdown of Officer's Race on "Officer Issued a Ticket."

	No Ticket	Ticket	Total
Non-White	32 (80%)	8 (20%)	40 (100%)
White	34 (55%)	28 (45%)	62 (100%)
Total	66 (65%)	36 (35%)	102 (100%)

Chi Squared = .008

The second officer characteristic to have an influence on the outcome of stops is the officer's length of tenure in the police department. Officers' tenure was correlated with the resistance offered by suspects: officers with longer tenure are more likely to have a suspect offering resistance. Specifically, officers making stops where the suspect resisted had an average of 9.3 years on the job, while officers on stops with no resistance had an average of just 3.8 years (see Table 13s). Either the more senior officers are handling cases with a greater likelihood of suspect resistance (perhaps deployment) or they are doing something that creates more resistance from the suspects (e.g. rougher treatment, less patience).

Table 13s. Breakdown of Officer's Tenure in Department on "Suspect Resisted."

	N	Mean	Standard Deviation
No Resistance	95	3.8	4.48
Resistance	7	9.3	7.57
Total	102	4.2	4.90

Significance Level = .004

Table 13. Factors Associated with the Results of Stops

Variable	Suspect Resisted	Suspect Frisked	Force Was Used	Suspect Searched	Suspect Issued Warning	Suspect Issued Ticket	Suspect Arrested
Public	.068	-.246*	.057	-.048	-.027	.097	.082
Type of Area							
Residential	.100	.234*	.097	.040	-.017	-.173	.005
Commercial	-.039	-.289**	-.045	-.091	.022	.205*	-.066
Secluded	-.047	.171	-.040	.127	.019	-.129	-.057
Other	-.079	.005	-.066	.017	-.022	.013	.149
Predom. African-American	.026	.035	.126	.011	-.010	-.015	.050
Trouble Spot	.068	.099	.070	-.129	.156	.055	-.033
Dark at Time of Stop	-.038	.095	-.073	.003	.035	-.159	-.106
Stop Occurred on Weekend	-.151	-.162	-.126	-.122	.163	.122	-.183
Gender (male)	.184	.282**	.154	.164	-.042	-.252*	.152
Race (black)	-.067	.135	-.042	.028	-.042	-.031	-.061
Age	-.023	-.282*	.000	-.255*	.147	.060	-.047
Class	-.147	-.173	-.192	-.124	.046	-.047	-.281**
Alcohol/Drugs	.380***	.470***	.338**	.491***	-.098	-.084	.457***
Reason for Forming Suspicion							
Appearance	-.047	.037	-.040	.127	-.110	.114	-.057
Behavior	-.368***	-.431***	-.358***	-.160	.134	.248*	-.096
Time and Place	-.062	.083	-.052	.068	.058	-.168	-.075
Information	.531***	.464***	.507***	.084	-.149	-.257**	.204*
Gender (female)	-.047	-.098	-.040	-.060	.148	-.129	-.057
Race (white)	-.100	-.095	-.097	-.040	-.117	.257**	-.073
Age	.121	.080	.021	.005	-.069	.188	-.114
Tenure	.283**	.119	.121	-.082	-.025	.025	-.034
Education (high school degree)	.111	.006	.041	-.104	.183	.027	-.072

* $p < .05$; ** $p < .01$; *** $p < .001$

Factors Associated with Demeanor/Disrespect

Bivariate analyses were performed in order to determine whether suspect or officer characteristics were correlated with the demeanor and disrespect variables. Five demeanor variables were examined: (1) final suspect demeanor, (2) final officer demeanor, (3) suspect's demeanor worsened over course of encounter, (4) officer's demeanor worsened over course of encounter, and (5) citizen displayed disrespect to the officer. The variable "officer showed disrespect to the citizen" is not included because only one officer showed disrespect to a citizen, making an analysis meaningless. Results of these analyses are presented in Table 14 (below). Results indicated that final suspect demeanor was correlated with officer tenure. This relationship was inverse; as officer tenure increased, the less likely that the suspect's final demeanor would be positive. More specifically as shown in Table 14a, suspects with a negative demeanor at the end of the police-citizen encounter had officers with an average of nearly eight years of tenure in the department. In contrast, suspects with either neutral or positive demeanors at the conclusion of their encounters with the police had officers with an average of only about 3½ years tenure in the police department. Perhaps, more experienced officers have less patience with suspects, resulting in more negative suspects at the conclusion of encounters.

Table 14. Factors Related to Officer/Suspect Demeanor and Disrespect

	Final Suspect Demeanor	Final Officer Demeanor	Suspect's Demeanor Worsened	Officer's Demeanor Worsened	Citizen Displayed Disrespect
Gender (male)	-.115	-.011	-.107	.164**	-.048
Race (black)	-.023	-.046	-.040	.096	-.048
Age	.003	-.070	.180*	.042	.037
Class	.149	.290***	.004	-.034	-.124
Alcohol/Drugs	-.036	-.134	.064	.163*	.145
Gender (female)	.019	-.045	.127	.127	.117
Race (white)	-.107	-.046	-.104	.024	-.063
Age	-.145	-.141	.100	.152	.094
Tenure	-.243***	.017	.188**	.220***	.241***
Education (high school degree)	.025	-.113	-.104	.084	.036

* p < .12; ** p < .10; *** p < .05

Table 14a. Breakdown of Officer's Tenure in Department on "Suspect's Final Demeanor."

	N	Mean	Standard Deviation
Negative	15	7.73	6.71
Neutral	45	3.76	4.66
Positive	41	3.46	3.91
Total	101	4.23	4.92

Significance Level = .010

Final officer demeanor was positively correlated with suspect class, with a positive final officer demeanor more likely when the suspect was of a higher social class. More specifically, only 39% of the officers ended their encounter with a positive demeanor when they judged the suspect to be of lower social class (see Table 14 b). This is compared to more than 60% of

officers ending their encounters with a positive demeanor when they perceive the suspect's social class a middle class or higher.

Table 14b. Breakdown of Suspect's Social Class on "Officer's Final Demeanor."

	Negative	Neutral	Positive	Total
Perceived as Low	5 (18%)	12 (43%)	11 (39%)	28 (100%)
Perceived as Middle	1 (2%)	20 (37%)	33 (61%)	54 (100%)
Perceived as High	-----	1 (25%)	3 (75%)	4 (100%)
Total	6 (7%)	33 (38%)	47 (55%)	86 (100%)

Chi Squared =.053

Two factors significantly increased the likelihood that suspect demeanor would worsen over the course of the encounter: the suspect's age and the officer's tenure. Suspect demeanor was more likely to worsen when the suspect was older and officer had more experience on the force. More Specifically, the average age of suspects is more than 8 years greater in cases in which the suspect's demeanor worsened throughout the encounter (see Table 14c).

Table 14c. Breakdown of Suspect's Age on "Suspect's Demeanor Worsened."

	N	Mean	Standard Deviation
Did not Worsen	69	31.32	13.98
Worsened	9	39.33	15.97
Total	78	32.24	14.34

Significance Level = .115

Table 14d. Breakdown of Officer's Tenure in Department on "Suspect's Demeanor Worsened."

	N	Mean	Standard Deviation
Did not Worsen	92	3.93	0.50
Worsened	11	6.91	1.59
Total	103	4.25	0.48

Significance Level = .057

Officer's tenure followed a pattern similar to the one for suspect's age. Specifically, in Table 14d, the mean officer tenure is less than four years for the cases where the suspect's demeanor did not worsen and nearly seven years for cases for which the suspect's demeanor worsened. Clearly, the longer the officer has been on the force, the more likely the suspect's demeanor would worsen over the course of the encounter with the police.

Three of the officer or suspect characteristics examined significantly increased the likelihood that the officer's demeanor would worsen during the encounter: the gender of the suspect, whether or not the suspect was high on alcohol or drugs, and the tenure of the officer (see Table 14). More specifically, an officer's demeanor was more likely to worsen when the suspect was a male. For example, only 3% of the officers had worsening demeanors when the suspect was a female, compared to 14% when the suspect was a male (see Table 14e). In addition, an officer's demeanor was more likely to worsen over the course of the encounter when the suspect was intoxicated (25%), than when the suspect was sober (9%) (see Table 14f). Apparently, officers were more likely to lose their patience with male suspects and suspects who were intoxicated.

Table 14e. Breakdown of Suspect's Gender on "Officer's Demeanor Worsened."

	Not Worse	Worsened	Total
Female Suspect	31 (97%)	1 (3%)	32 (100%)
Male Suspect	61 (86%)	10 (14%)	71 (100%)
Total	92 (89%)	11 (11%)	103 (100%)

Chi Squared = .087

Table 14f. Breakdown of Suspects Under the Influence on "Officer's Demeanor Worsened."

	Not Worse	Worsened	Total
Not Under the Influence	78 (91%)	8 (9%)	86 (100%)
Under the Influence	9 (75%)	3 (25%)	12 (100%)
Total	87 (89%)	11 (11%)	98 (100%)

Chi Squared = .107

Finally, when the officer had longer tenure in the department, it was more likely for their demeanor to worsen over the course of the police-citizen interaction. Specifically, officers whose demeanor worsened had an average of 7.36 years on the force. Compare this to the mean of 3.88 years on the force for officers whose demeanor did not worsen (see Table 14g).

Table 14g. Breakdown of Officer's Tenure on "Officer's Demeanor Worsened."

	N	Mean	Standard Deviation
Did not Worsen	92	3.88	4.30
Worsened	11	7.36	8.12
Total	103	4.25	4.91

Significance Level = .026

Disrespect on the part of the citizen was more likely when the officer with whom he/she was interacting had greater tenure. In Table 14h, we can see that the mean tenure of officers in encounters in which the citizen showed disrespect is nearly twice (3.8 versus 7.5) that of officers experiencing no disrespect.

Table 14h. Breakdown of Officer's Tenure on "Citizen Displayed Disrespect to Officer."

	N	Mean	Standard Deviation
No Disrespect	91	3.82	4.62
Showed Disrespect	12	7.50	5.99
Total	103	4.25	4.91

Significance Level = .014

Citizen's Demeanor and Outcome of the Stop

Finally, we address the question of whether the citizen's demeanor or level of respect shown toward the officer affected the outcome of the stop with respect to whether the officer gave the citizen a ticket or actually arrested the citizen. The observer's evaluation of the citizen's initial demeanor (positive, neutral, or negative) is not significantly related to being ticketed or arrested (see Table 14i). The relationship was not significant, but showed that citizens who were judged as neutral by the observer received more tickets and or arrests (46%) than others. That is, citizens who displayed a positive initial demeanor toward the officer, as judged by the observers, were less likely to receive a ticket or be arrested than citizens either negative or neutral toward the officer. Since the relationship was not statistically significant, these differences may not hold up when replicated in similar situations.

Table 14i. Observer's Evaluation of Suspect's Initial Demeanor and Outcome of the Stop

Citizen's Initial Demeanor	No Ticket or Arrest	Ticket and/or Arrest	Total
Negative	8 (57%)	6 (43%)	14 (100%)
Neutral	29 (54%)	25 (46%)	54 (100%)
Positive	22 (69%)	10 (31%)	32 (100%)
Total	59 (59%)	41 (41%)	100 (100%)

Chi Squared = .386

Another measure of the citizen's demeanor was the observer's evaluation of whether or not the citizen was disrespectful or not throughout the entire police/citizen interaction. This measure of citizen demeanor was not significantly related to the outcome of the stop (see Table

14j), but citizens who were judged disrespectful toward the officer received more tickets and arrests than other citizens. Fifty-eight percent of the citizens showing disrespect received a ticket or were arrested by the officer while only 39% of the respectful citizens received a ticked or were arrested. However, just as the earlier findings, these are not statistically significant and therefore may not hold up in other similar studies.

Table 14j. Observer's Evaluation of Suspect's Attitude and Behavior and Outcome of the Stop

Citizen Disrespected Officer?	No Ticket or Arrest	Ticket and/or Arrest	Total
No	55 (61%)	35 (39%)	90 (100%)
Yes	5 (42%)	7 (58%)	12 (100%)
Total	60 (59%)	42 (41%)	102 (100%)

Chi Squared = .225

Finally, our measure of the officer's evaluation of the citizen's demeanor was analyzed . Officers were asked if they thought the citizen was respectful or disrespectful toward them during the encounter. Using this measure, we found a significant relationship between citizen demeanor and the outcome of the stop (see Table 14k). Sixty-seven percent of the citizens judged by the officers as disrespectful were given a ticket or arrested compared to only 38% of the respectful citizens. According to this measure, which is based on the officer's evaluation, citizens being disrespectful were nearly twice as likely to be ticketed or arrested than citizens showing no disrespect.

Table 14k. Officer's Evaluation of Suspect's Attitude and Behavior and Outcome of the Stop

Citizen's Attitude toward the Officer	No Ticket or Arrest	Ticket and/or Arrest	Total
Disrespectful	4 (33%)	8 (67%)	12 (100%)
Respectful	56 (62%)	34 (38%)	90 (100%)
Total	60 (59%)	42 (41%)	102 (100%)

Chi Squared = .056

Measuring citizen demeanor is a difficult task that can be affected by the type of measure, when the behavior is observed and who assesses the behavior. Although some of our data do not permit definitive statements, they do show the complexity of the issue and the need for further research. In this case, it was the officer's evaluation of the citizen's demeanor throughout the encounter that significantly affected the outcome of the stop.

Description of Officers

In the Savannah study, forty-nine officers were observed over the course of 132 rides. Most officers in this study were male. White/Caucasian officers were the most common racial/ethnic group of officers, followed by African-American officers. The average age of officers in this study was 35 years old. Officers had an average of 5.2 years on the police force. Nearly half of officers had a high school diploma as their highest level of education; the remaining officers had either an associate's degree or a bachelor's degree. More detailed information is provided in Tables 15-19 (below).

Table 15. Officer Gender

	N	%
Male	44	89.8
Female	5	10.2
Total	49	100.0

Table 16. Officer Race

	N	%
Anglo	28	57.1
African-American	18	36.7
Other	3	6.1
Total	49	100.0

Table 17. Officer Years of Service

	N	Minimum	Maximum	Mean	Std. Deviation
Tenure	49	1.00	21.00	5.24	4.87

Table 18. Officer Age

	N	Minimum	Maximum	Mean	Std. Deviation
Age	49	22.00	52.00	34.96	7.49

Table 19. Officer Education

	N	%
H.S. diploma	23	46.9
Associate degree	14	28.6
Bachelor's degree	10	20.4
Master’s degree	2	4.1
Total	49	100.0

After officers were observed for a shift, each observer filled out Section B of the *Officer Form* (see Appendix A). These data were generated by each observer recording his/her overall assessment of the officer's style of decision-making, or more specifically, the factors that the

officer took into account when forming suspicion of the target. It should be noted that this was an *overall* assessment of the officer, and not an assessment of the officer with regard to any one particular incident.

Figure 18 shows the observers' perceptions of the importance of appearance in officer decision-making. "Appearance," referring to things such as distinctive dress, indicators of class, and the like, appeared to be an important factor to the majority of officers, with most officers rating appearance of a medium priority (44.2%; n = 19) rather than high priority (18.6%; n = 8).

Observers' explanations of these ratings were qualitatively analyzed to provide some insight into the reasons officers considered appearance important or unimportant. The following are some explanations given by officers who rated appearance as a medium or high priority:

- Despite ethnicity, if someone is wearing all black clothing, this is an indication that they are up to no good
- Officer is well acquainted with people and places in his beat; he can tell based on appearance who "doesn't belong"
- Person who looks "different" raises suspicion (e.g., white person in black neighborhood)

In contrast, officers who rated appearance to be of low priority typically provided one of two explanations: (1) that most people encountered looked similar enough to render appearance meaningless as a factor that might arouse suspicion [e.g., "Everyone in my beat (residential and predominantly black) wears the same 'uniform of the day'—a white muscle shirt with black pants."] or (2) that they did their best not to judge people based on their appearance (e.g., "I do not make any assumptions based on a person's appearance; I treat everyone equally until after a stop.").

Figure 18. Importance of Appearance in Forming Suspicion

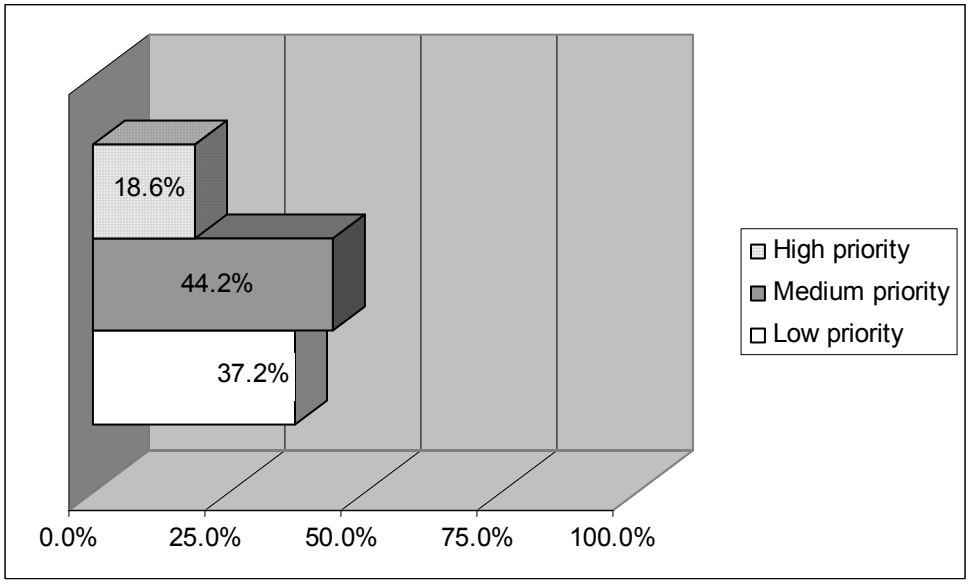
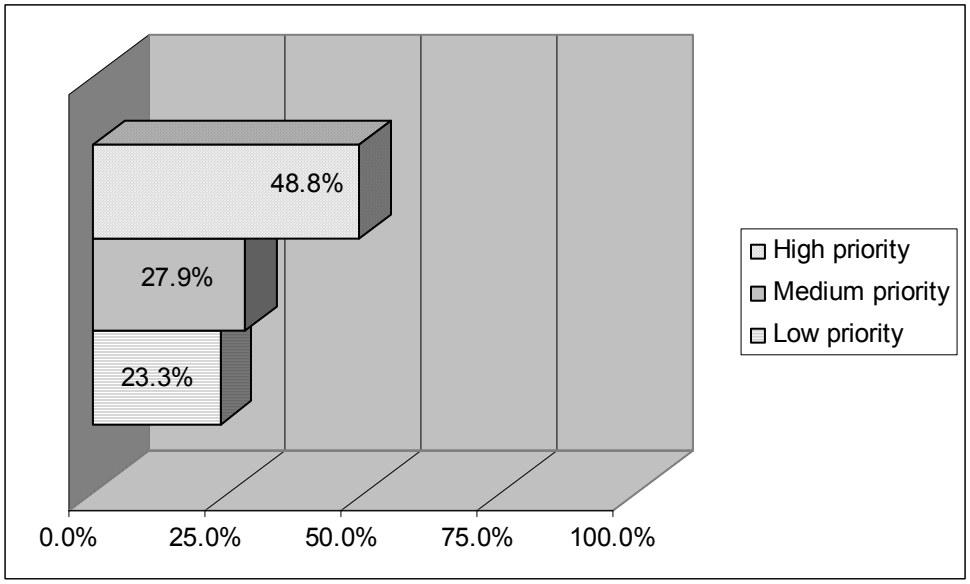


Figure 19 (below) depicts the relative influence of behavior in the formulation of suspicion by the police officers in this study. Most officers described behavior as playing a significant role in their decision-making. Nearly half of officers (48.8%; n = 21) reported that behavior was a high priority and an additional one-third (27.9%; n = 12) stated that behavior was a medium priority in forming suspicion. Again, observers' explanations of their ratings were qualitatively analyzed to provide some insight into the importance of behavior in forming suspicion. The following are examples of comments provided by officers who treated behavior as being of medium or high importance in forming suspicion:

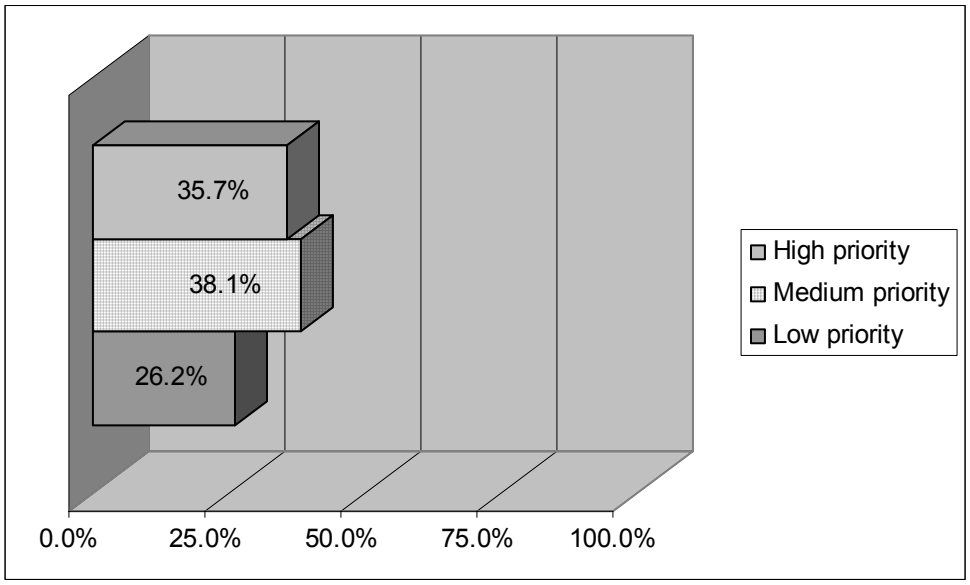
- Police officer stated that he watches out for the “felony stare” (i.e., getting nervous when they see a police car, making every effort to avoid the police).
- Police officer said that behavior is very important to him because he can tell when a person is lying to him. He can tell this by the way they act.
- Police officer said he can tell if someone has done something just by how they respond to him.
- “It is very important to tell if they are fidgeting.”

Figure 19. Importance of Behavior in Forming Suspicion



Analyses conducted on the importance of time and place in officer decision-making (see Figure 20) revealed that, in a little over one-quarter of cases, time and place were irrelevant in whether officers formed suspicion (26.2%; n = 11). An examination of narrative descriptions of the reasons observers gave for their ratings showed that when observers rated time and place unimportant, it was usually because officers were not observed forming suspicion or making stops, or because the officers appeared to be driven solely by the behavior of individuals.

Figure 20. Importance of Time and Place in Forming Suspicion



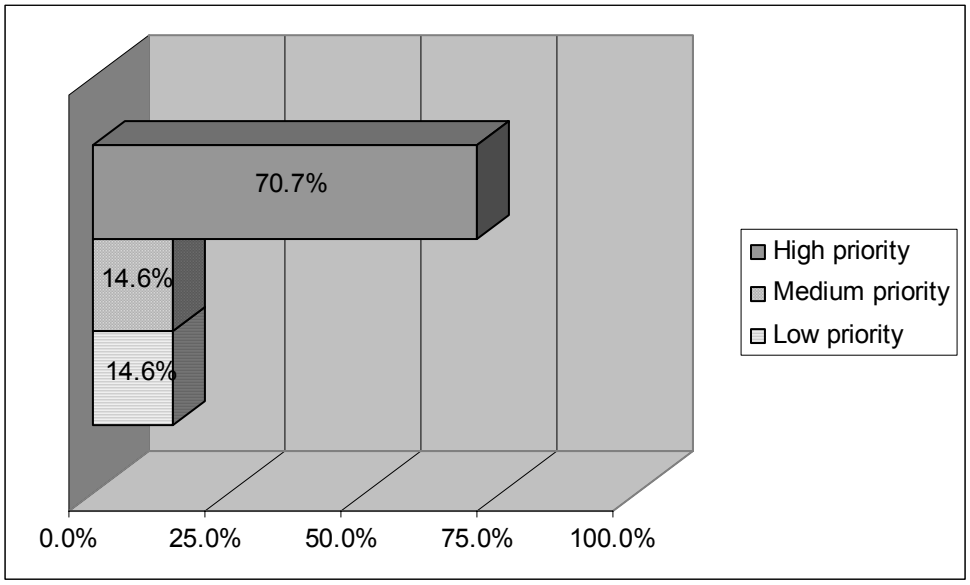
On the other hand, time and place was either of medium (38.1%; n = 16) or high (35.7%; n = 15) priority for the majority of officers observed in this study. Most often, this was related to people/vehicle(s) being out of place given a particular location at a given time. For instance, officers often relied on their knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours) to form suspicion. For example:

- Certain places have higher incidence of crimes; people who look out of place (e.g., white person in black neighborhood) get stopped.
- Pays close attention at night because people can use the dark to their advantage to aid them committing crimes.
- People who look out of place are very suspicious, especially white people in a black neighborhood.
- Persons who were where they shouldn't be (e.g., juveniles on a school playground at night) got stopped

Observers were also asked to rank the importance that information might play in determining the decision-making of police officers. As shown in Figure 21, a small number

(14.6%; n = 6) of observers rated that information rarely played a role in whether officers formed suspicion. In contrast, observers rated the great majority of officers as treating information as a high priority.

Figure 21. Importance of Information in Forming Suspicion



Observers were instructed to inquire as to whether officers relied on any "working rules" that guided officers' decision-making or behavior during a shift. Approximately three-fourths (77.1%; n =37) of the officers observed in this study reported using some type of working rule(s) that help them identify suspicious persons or determine how to handle a particular situation. Below we provide some examples of the working rules used by the officers in this study:

- This police officer stated he liked to go after stolen vehicles because "you can get guns, drugs, and robbery suspects from these stops."
- Police officers stops drivers based on whether they broke the law or not. He decides whether to give a warning or a ticket based on the suspect's demeanor, although he likes to avoid giving tickets or making arrests.
- This officer stated that he would issue a warning to the first African-American person he stopped, and also to the first Caucasian he stopped (then he would begin to ticket). He did this so no one could say he was unfair to any race. He stressed fairness.

- Officer said he takes the demeanor of individual into account when deciding what to do to him/her.

Multivariate Analysis of Officer's Decision-making[2]

One final analysis was conducted to examine the relative strength of determinants of officers' decision making with regard to forming suspicions and making traffic stops. This required combining all the independent variables into a single analysis to examine the relative weight of each, when controlling for the effects of all of the other variables. We examined the role that officer and suspect demographics, characteristics of the area, and the mode of transportation played in officers making these decisions. For example, an officer's view of a suspect would vary if a civilian were driving a car compared to walking. Specifically, we assess whether the officer's race, level of education, and tenure on the police force affected their reasons for forming suspicion. Additionally, we assess the relationship between the type of suspicion, the suspect's race, the racial makeup of the neighborhood, and the perception of the neighborhood's level of dangerousness, the type of action in which a suspect was engaged, and their mode of transportation.

Dependent Variables

There were 174 situations in which officers formed suspicion. For the purposes of this analysis we are interested in examining the predictors of the type of suspicion a police officer formed and whether the suspicion resulted in a stop. Therefore, we divided suspicion into behavioral and non-behavioral categories. The interest in this analysis of suspicions is to explain

[2] We would like to thank Brian Renner for his useful comments. As a result, we have modified the discussion of the missing data that may also be relevant for explaining the multivariate analysis. We do not include an overall model chi-square because the pseudo R2 is based on the chi-square fit. The value the pseudo R2 in the present model of non-behavioral suspicion is quite large (.487) and statistically significant. In addition, there is no statistical reason to eliminate coefficients that that have values of 1 in the confidence interval. Collinearity diagnostics on the current model indicate that collinearity was not a problem with the analysis. In addition, we did not conduct a reverse stepwise logistic regression analysis because we wanted to examine the independent effect of each variable.

the different criteria for making decisions to stop citizens when these decisions are based on non-behavioral and behavioral criteria. Behavioral criteria include specific actions by citizens that are either illegal or interpreted by the officer as objectively suspicious. One example of a behavioral criterion for suspicion would be observing the commission of a traffic offense. Obviously, not all police officers stop all traffic violators, but an observed traffic violation clearly justifies an officer making a stop. Non-behavioral criteria included officers' concern about appearance, time and place, and descriptive information provided to the officer. These suspicions based on non-behavioral criteria do not necessarily provide a clear justification for a stop. Therefore, stops based on non-behavioral criteria are especially interesting to understand because they provide a stronger basis for understanding the social and psychological dynamics behind the forming of suspicion. These non-behavioral suspicions were coded to equal 1. Stops of citizens were dummy coded to equal 1 and 0 if the citizen were not stopped. Because the dependent variables in this study are dichotomous we model the process using logistic regression.

Independent Variables

As noted above, the research literature suggests that demographic characteristics of officers are important factors in police decision-making. Therefore, we include measures of the race, level of education, and number of years in-service for each observed officer. Race of the officer was dummy coded to equal 1 if the officer was White. Education of officers was coded into the dummy variable for which 1 equals some level of college education (e.g., associates, bachelors, or masters degree). The number of years the officer had worked for the police department was included as a continuous variable. Research also suggests that racial characteristics of suspects and the racial composition of an area police are patrolling are

important ingredients in their decision-making process. We included a dummy measure of race of suspect that equals 1 if the civilian were Black. In terms of neighborhood composition, we included a dummy variable that equals 1 if the neighborhood were classified as predominately Black. These neighborhood racial categories were based upon the police officers' perceptions of the area they were patrolling. We also included a measure of the officers' perception of the neighborhood that indicated whether the area appeared to be "troubled." Troubled neighborhoods were coded to equal 1. Because the mode of transportation may influence whether officers can see suspects and/or form a suspicion, we included a dummy variable coded to equal 1 if the suspect were driving an automobile. Finally, because officers may form suspicion or perform stops based on suspect behavior, we include a measure of whether the suspect committed a traffic offense. Cases involving traffic offenses were dummy coded to equal 1. The purpose of this variable is to allow us to select out cases for which suspicion was formed for non-behavioral reasons. There were additional variables that were collected in this study that would be germane to include in the analysis, such as distinctive dress, vehicle type, vehicle condition, and BOLO. Unfortunately, there were too much missing data on these factors to include them in the multivariate analysis.

Results of the Multivariate Analyses

Table 20 includes the descriptive statistics for the dependent and explanatory variables of this sub-sample. Thirty-four percent (N=59) of the observations involved a non-behavioral suspicion. Stops of suspicious persons were coded to equal 1. 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 a bachelor's degree. On average, police

officers have 4.2 years of experience on the force. In approximately 41 percent of cases, the officers indicated that the area was 'troubled.' Seventy-one percent of suspects were Black. In forty-seven percent (N=82) of suspicions, the suspect committed a traffic offense. Seventy percent of suspects were driving a car. Fifty-seven percent of the suspicions were formed in predominately Black neighborhoods. Two separate logistic regression models were estimated to examine the relationship between the explanatory variables, non-behavioral suspicions and stops.

Table 20. Descriptive Statistics of Variables

Variable	Mean	SD	Min	Max
Non-behavioral suspicion	.339	.474	0	1
Stops of citizens	.591	.492	0	1
Traffic offense	.471	.500	0	1
Black citizen	.709	.455	0	1
White officer	.563	.497	0	1
College education of officer	.298	.459	0	1
Suspect in car	.70	.459	0	1
Troubled neighborhood	.405	.492	0	1
Black neighborhood	.567	.496	0	1
Officers years in service	4.224	4.233	1	21

The results from the logistic regression models are displayed on Table 21. The results indicate that suspect and officer demographic variables play an important role in forming non-behavioral suspicion. Officers are significantly more likely to form a non-behavioral suspicion when the suspect is Black ($b=1.49$; $p<.05$). The odds of a non-behavioral suspicion being

formed were 4.4 times greater if the suspect were Black. There was no relationship between the race of the officer and the likelihood of forming a non-behavioral suspicion. The longer the officers had been on the police force the more likely they were to form non-behavioral suspicions (b=.100; p<.10). If a suspect were in a car, it is more likely that a police officer would form a non-behavioral suspicion (b=2.08; p<.05). That is, when a citizen is in a car, officers were 8.0 times as likely to form a non-behavioral suspicion. In contrast, if a suspect were observed committing a traffic offense (behavior), then suspicion was significantly less likely to be formed for non-behavioral reasons (b=-5.40; p<.05). The racial composition of the neighborhood and the perception of it being troubled had no influence on forming non-behavioral suspicions. These results suggest that suspect race and method of transportation play an important role in the types of suspicion that police officers form. Importantly, however, these data do not allow us to examine a number of factors that may be related the effect of citizen race on non-behavioral suspicion, such as wearing gang colors or extreme tinting on vehicle windows.

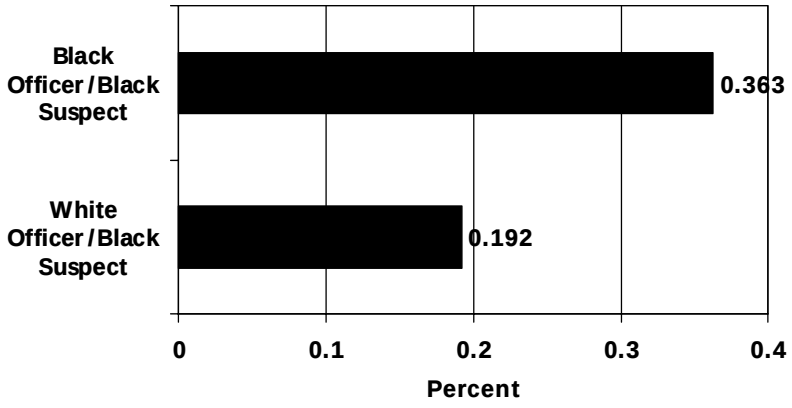
Table 21. Predictors of Non-Behavioral Suspicions

Variable	Odds Ratio	Z –value	95% Confidence Interval
Traffic offense	.004	5.627	.0044 -- .004
Black citizen	4.447	2.134	1.129 -- 17.516
White officer	.418	-1.457	.129 -- 1.351
College education of officer	1.992	1.138	.607 -- 6.529
Suspect in car	8.073	2.999	2.061 -- 31.613
Troubled neighborhood	1.090	.141	.324 -- 3.664
Black neighborhood	.711	-.543	.208 -- 2.427

Officers years in service	1.112	1.670	.981 -- 1.261
Pseudo R^2	.487		

To provide a more meaningful interpretation of the results a series of predicted probabilities were calculated for the average case. For example, for the average case the probability of non-behavioral suspicion was .18. If a suspect was Black and an officer was white then the probability of a non-behavioral suspicion was .19. If a suspect and officer were Black the probability of a non-behavioral suspicion increased to .36 (see Figure 22). The probability of a non-behavioral suspicion was only .05 if the officer and suspect were white. These findings clearly illustrate that non-behavioral suspicions are most common when a suspect and an officer are both Black, and least common when an officer and suspect are white.

Figure 22. Probability of Non-Behavioral Suspicions: By Office and Suspect Race



To see if the reasons for types of suspicion formed are the same as those for stops, we include the same set of predictors in the model for stops. The results from the model are

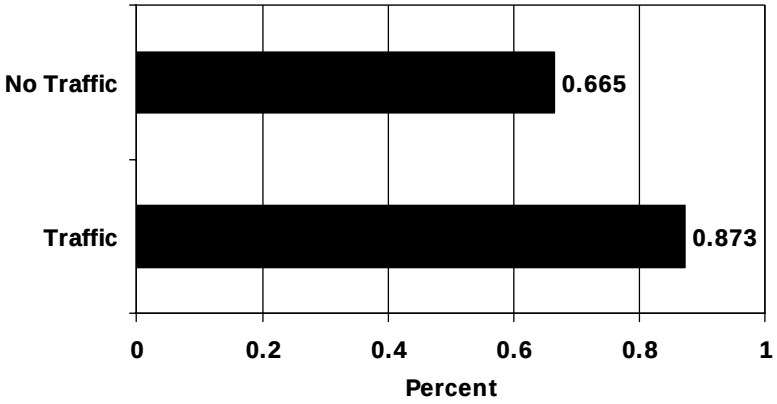
displayed in Table 22. In contrast to the predictors of the type of suspicion, suspect and officer demographics play no role in the reasons for stopping suspicious persons. In fact, the only variable that significantly predicts stopping suspicious persons is if someone committed a traffic offense ($b=2.35$; $p<.05$), a behavior that can always justify a stop. Predictably, the risk of being stopped was 10.5 times more likely if the suspect committed a traffic offense.

Table 22. Predictors of Citizen Stops

Variable	Odds Ratio	Z –value	95% Confidence Interval
Traffic offense	10.551	4.342	3.642 -- 30.563
Black citizen	.919	-.187	.379 -- 2.226
White officer	1.269	.544	.537 -- 2.995
College education of officer	.692	-.804	.282 --1.696
Suspect in car	.503	-1.324	.182 --1.390
Troubled neighborhood	1.531	.938	.628 --3.732
Black neighborhood	.710	-.761	.293 -- 1.716
Officers years in service	1.023	0.459	.925 -- 1.133
Pseudo R^2	.170		

In terms of predicted probabilities, the results indicate that the probability of being stopped was .87 if the suspect committed a traffic offense and only .39 if no traffic offense had been committed (see Figure 23). These findings clearly illustrate that the factors that lead to forming a non-behavioral suspicion is different from that which leads police officers to stop suspicious persons. In fact, it appears that officers often form suspicions of persons for factors that do not result in actual stopping and questioning citizens.

Figure 23. Probability of Stops: By Traffic Offense



Reasons for Forming Suspicion

Using the results from the logistic regression models that predicted suspicions, we turn to an examination of the criteria for the officers' decisions of non-behavioral suspicion. We examine the predicted probabilities from the logistic regression model of non-behavioral suspicion. We examine the cases where the probability of non-behavioral suspicion ranked in the 90th percentile or above. In other words, these are the cases where there was a 90% or greater chance that the officer formed a non-behavioral suspicion. There were a total of 13 cases that met this criterion. The narrative descriptions of the reasons that officers formed suspicions in these cases are informative. For example, in one case the officer formed suspicion because the suspect was driving a motor vehicle that fit the description of a "G-ride" – heavily tinted windows, custom rims, and a flashy paint job. Four out of these thirteen cases involved vehicles that matched a BOLO (be on the lookout) call. One case involved a suspect who was in the vicinity of a robbery and shooting that had occurred recently. Two cases involved suspects who

appeared to act nervous when officers pulled next to their cars. Another case involved a woman hiding in the “shadows of a known prostitution area.” The narrative descriptions of cases indicate that the probability of non-behavioral suspicion was greatly influenced by officers having pre-existing information on suspects or events where civilians were in areas of known criminal activity, or where civilians acted nervous when the police approached.

Reasons for Stopping Suspects

Similar to the previous analysis, we examined the descriptions of the officers' rational for stops for cases where the predicted probability of stopping a citizen ranked in the 90th percentile or above. In other words, these were cases based on the logistic regression model that had the highest probability of being stopped by the police. There were a total of 10 cases that met this criterion. The narrative descriptions of these cases show that “traffic offenses” were the predominate reason that officers stopped citizens. Eight out of the 10 cases involved stops based on traffic offenses. The two exceptions involved a case where a citizen was stopped because the citizen matched a description of a robbery suspect and a case where a citizen was "hanging around a locked trailer in a parking lot." Three cases involved citizens who were stopped because of 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 observing citizens committing traffic related offenses. Importantly, these narrative descriptions indicate further evidence that the reasons for non-behavioral suspicion differ from those that cause the police to stop citizens.

How Citizens View Their Interactions with the Police

In addition to the coded information our interviewers obtained from observing the interactions between officers and citizens and questioning officers specifically, this study also attempted to contact citizens to ask them about their perceptions of their interaction with the police. This was an attempt to get the citizen's point of view and to allow us to determine how many encounters resulted in inconsistent versions when comparing police and citizens points of view. Also, it is important to determine what citizens are thinking and why they engaged in the behavior they did during the police/citizen interaction and how they interpreted the officer's behavior.

The police officers were instructed to ask the citizens at the conclusion of their interaction if they were willing to talk directly to an observer. If the citizen agreed, the observer would ask the citizen to give the interviewer their phone number so the interviewer could contact them at a later time to ask them some questions about their interaction with the officer. Although a majority of citizens agreed to participate in this phase of the study, observers were only able to complete 15 interviews. A significant number of citizens who were asked to participate refused to give out their phone number to the interviewer, others gave the interviewer incorrect or non-working phone numbers. Still others refused to talk with the interviewers when they called. Many citizens thought the observers were lawyers, able to help them with their case. When they found out the observers were interested in asking them about their impressions of the interaction with the police officer, and not able to help them, they refused to cooperate further. As a result, we have a small and suspect sample of respondents for this phase of the study. This sampling problem allows us only to draw a few general conclusions from the data we obtained.

Unfortunately, this approach was unsuccessful in obtaining what had the potential to be very important information from the citizens' perspective about their interactions with the police.

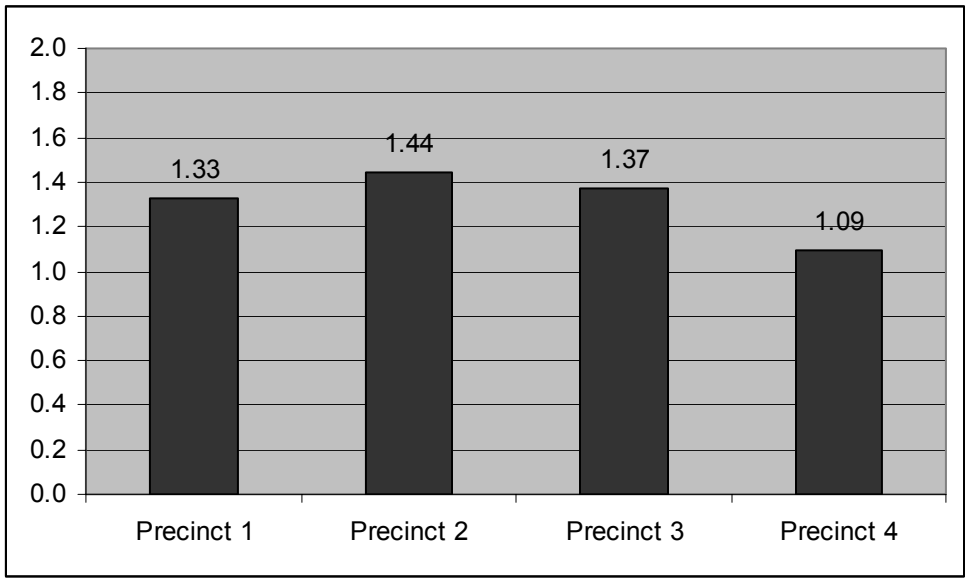
In general these respondents had favorable views of their interactions with the Savannah police officers. Out of the 15 respondents only 1 indicated that the officer's demeanor was "rude and defensive." Fourteen out of the fifteen respondents indicated that the officers demeanor was "professional," "friendly," and "straightforward." In general, these results suggest from a small and self-selected group of citizens, that the impressions of their interaction with the police were positive in nature. Because of the low response rate of this survey, however, it is unclear whether the majority of citizens, who interacted with the police, shared the same positive view.

Chapter 3 Appendix A
Precinct-Level Analyses

In this appendix, the results are presented for each of the four precincts of the Savannah Police Department. These findings must be understood within the context of the features of the areas under examination. Results are presented in the same order as the department-wide findings.

Description of Suspicion

Figure A-1. Average Number of Times Suspicion Was Formed per Tour by Precinct



In Precinct 1, officers form suspicion between 0 and 7 times per shift, with an average of 1.33 suspicions formed per tour. In Precinct 2, the range of suspicions formed per tour was 0-4 and the average number of suspicions formed was 1.44. In Precinct 3, the range was also 0-4, with a slightly higher average number of suspicions form per tour (1.37). Finally, the average number of suspicions form per tour was lowest in Precinct 4,

with officers forming suspicion an average of 1.09 times per tour. Officers form suspicion between 0 and 3 times per tour in this precinct.

While there was variation among the precincts in the average number of times a suspicion was formed per tour, these differences were not significantly different.

Characteristics of the Area in Which Suspicion Was Formed

Table A-1. Type of Area in which Suspicion Was Formed

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
Residential	11	30.6	30	56.6	38	61.3	10	43.5
Commercial	23	63.9	17	32.1	22	35.5	9	39.1
Secluded	2	5.6	3	5.7	1	1.6	0	0.0
Other	0	0.0	3	5.7	1	1.6	4	17.4
Total	36	100.0	53	100.0	62	100.0	23	100.0

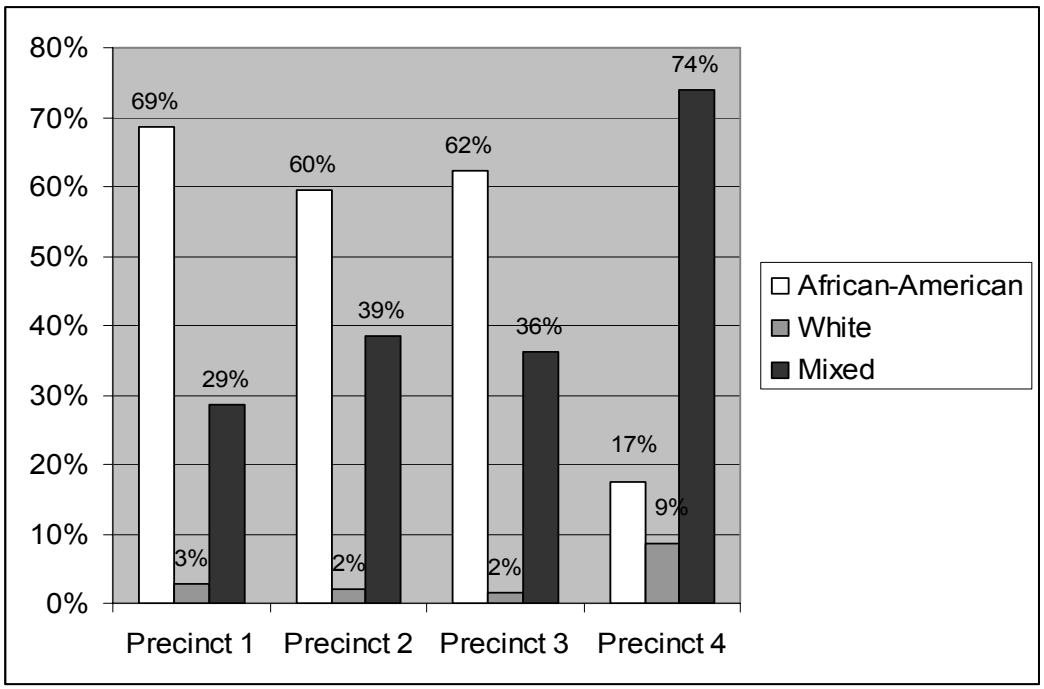
Crosstabular analyses reveal that officers in the various precincts were significantly different from one another in that officers formed suspicion in different types of areas ($\chi^2 = 22.303$; df = ; p. = .008). For Precincts 2, 3, and 4, the greatest number of suspicions was formed in residential areas. This contrasts with Precinct 1, where the majority of suspicions were formed in commercial areas.

Table A-2. Officer Indicated Area Was a Trouble Spot

	Precinct 1		Precinct 2		Precinct 3		Precinct 4	
	N	%	N	%	N	%	N	%
No	16	45.7	27	50.9	46	78.0	12	52.2
Yes	19	54.3	26	49.1	13	22.0	11	47.8
Total	35	100.0	53	100.0	59	100.0	23	100.0

Crosstabular analyses reveal that officers in the various precincts differ in their opinion as to whether a suspicious stop occurred in trouble spots ($\chi^2 = 13.222$; df = 3; p. = .004). While precincts 1, 2, and 4 were similar in the distribution of suspicions across areas considered troublesome or "normal," Precinct 3 was significantly different from the others, as fewer suspicions were formed in areas officers considered trouble spots.

Figure A-2. Racial Makeup of Areas in Which Suspicion Was Formed



The precincts are significantly different in terms of the racial makeup of the areas in which suspicion was formed ($\chi^2 = 18.640$; df = 6; p. = .005). In this case, officers in Precinct 4 formed far fewer suspicions in predominantly African-American areas and far more suspicions in white and racially mixed areas compared to officers in the other precincts.

Characteristics of the Individuals about Whom Suspicion Was Formed

Table A-3. Suspect Gender

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
Female	8	22.9	9	20.0	12	21.4	12	57.1
Male	27	77.1	36	80.0	44	78.6	9	42.9
Total	35	100.0	45	100.0	56	100.0	21	100.0

The precincts are significantly different from one another in terms of the gender of the persons about whom they became suspicious ($\chi^2 = 12.180$; df = 3; p. = .007). In Precincts 1, 2, and 3 police formed suspicion of males at far greater rates than they formed suspicion of females. The majority of suspicions formed by officers in Precinct 4 involved female suspects at a rate of almost three times greater.

Table A-4. Suspect Race

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
Other	16	45.7	10	22.7	8	14.5	11	52.4
African-American	19	54.3	34	77.3	47	85.5	10	47.6
Total	35	100.0	44	100.0	55	100.0	21	100.0

There are significant differences among the precincts in terms of the race of the persons about whom they became suspicious ($\chi^2 = 16.735$; df = 3; p. = .001). In Precincts 1, 2, and 3, the majority of suspicions were formed of African-American suspects. This is different than Precinct 4, where the majority of suspicions involved suspects of an "other" racial/ethnic background.

Table A-5. Suspect Class

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
Low	11	42.3	5	29.4	9	30.0	3	23.1
Middle	15	57.7	12	70.6	21	70.0	6	46.2
High	0	0.0	0	0.0	0	0.0	4	30.8
Total	26	100.0	17	100.0	30	100.0	13	100.0

There are significant differences among the precincts terms of the class of the individuals about whom the police formed suspicion ($\chi^2 = 24.785$; df = 6; p. = .000). Precinct 4 was significantly different from the others, with more suspicion formed of persons of higher-class status than the other three precincts.

Table A-6. Suspect Class Relative to Officer Class

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
Lower	8	32.0	5	31.3	8	28.6	3	42.9
Same	16	64.0	11	68.8	19	67.9	3	42.9

Higher	1	4.0	0	0.0	1	3.6	1	14.3
Total	25	100.0	16	100.0	28	100.0	7	100.0

There are no significant differences in the relative class of the suspect compared to the officer by precinct.

Table A-7. Average Age of Suspect

	Precinct 1	Precinct 2	Precinct 3	Precinct 4
Age	34.76	26.47	28.52	35.95

Statistical analyses revealed no significant differences among precincts in the age of the individuals about whom suspicion was formed.

Table A-8. Suspect Was Under the Influence of Alcohol/Drugs

	Precinct 1		**Precinct 2**		**Precinct 3**		**Precinct 4**	
	N	%	N	%	N	%	N	%
No	20	83.3	13	76.5	35	94.6	18	90.0
Yes	4	16.7	4	23.5	2	5.5	2	10.0
Total	24	100.0	17	100.0	37	100.0	20	100.0

There are no significant differences in the sobriety of the individuals about whom a suspicion was formed by precinct.

Characteristics of Day and Time Suspicion Was Formed

Table A-9. Suspicion Was Formed on Weekend

	Precinct 1		Precinct 2		Precinct 3		Precinct 4	
	N	%	N	%	N	%	N	%
No	21	58.3	27	50.9	43	69.4	22	95.7
Yes	15	41.7	26	49.1	19	30.6	1	4.3
Total	36	100.0	53	100.0	62	100.0	23	100.0

Crosstabular analyses reveal that the precincts are significantly different from one another by the day of week when suspicion was formed. Precinct 4 was significantly different from the others, with far more suspicions formed during the week than the other three precincts ($\chi^2 = 15.310$; df = 3; p. = .002).

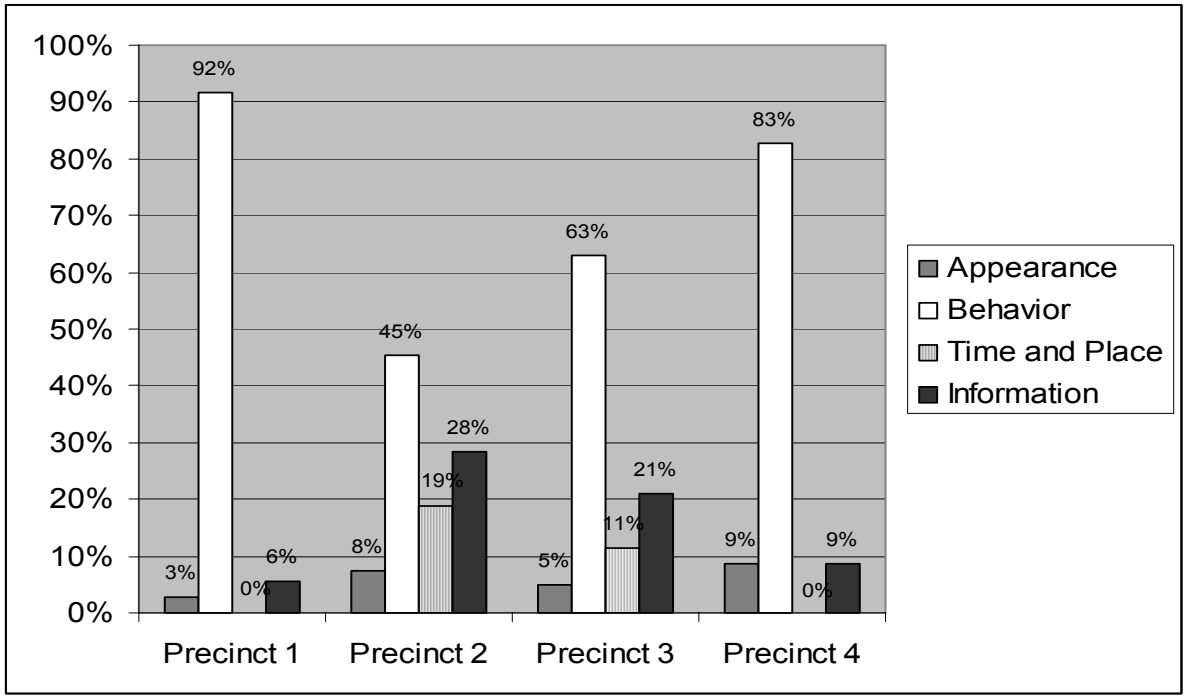
Table A-10. Dark at Time of Suspicion

	Precinct 1		Precinct 2		Precinct 3		Precinct 4	
	N	%	N	%	N	%	N	%
No	19	52.8	33	63.5	38	61.3	21	91.3
Yes	17	47.8	19	36.5	24	38.7	2	8.7
Total	36	100.0	52	100.0	62	100.0	23	100.0

Crosstabular analyses reveal that the precincts were significantly different from one another in terms of time at which police formed suspicion ($\chi^2 = 9.631$; df = 3; p. = .022). In this case, officers in Precinct 4 formed the fewest number of suspicions during nighttime hours compared to officers in Precincts 1, 2, and 3.

Bases for Suspicion

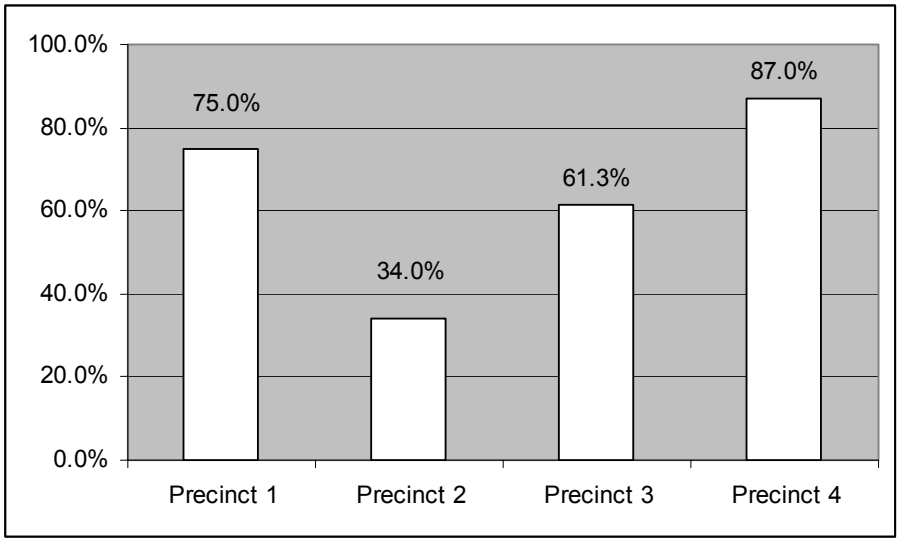
Figure A-3. Main Reason for Forming Suspicion



The precincts are significantly different from one another in terms of the reasons for which police formed suspicion ($\chi^2 = 27.224$; df = 9; p. = .001). Suspicions formed on the basis of suspect behavior were most common in Precinct 1, while suspicion based on information was most likely in Precinct 2.

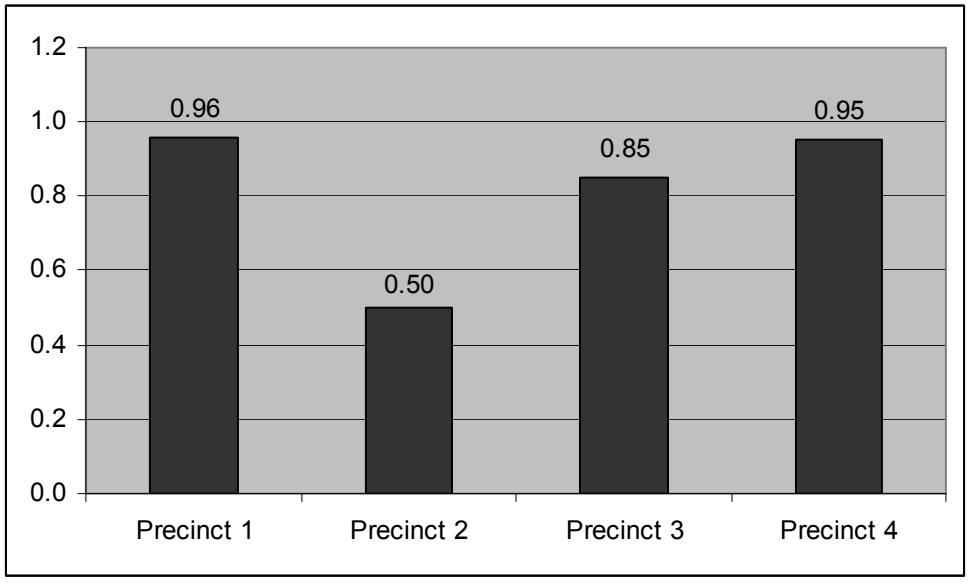
Description of Stops

Figure A-4. Suspicion Resulted in Person/Vehicle Stop



The precincts are significantly different from one another in terms of the reasons for which police form suspicion. ($\chi^2 = 25.145$; df = 3; p. = .000). In this instance, suspicions were far less likely to result in a stop in Precinct 2 compared to Precincts 1, 3, and 4.

Figure A-6. Average Number of Stops Made per Tour by Precinct



There are no statistically significant differences in the number of stops based on suspicion made per tour by precinct.

Outcomes of Stops

Although there are differences among precincts by outcomes, none of the differences was statistically significant.

Figure A-7. Use of Coercion

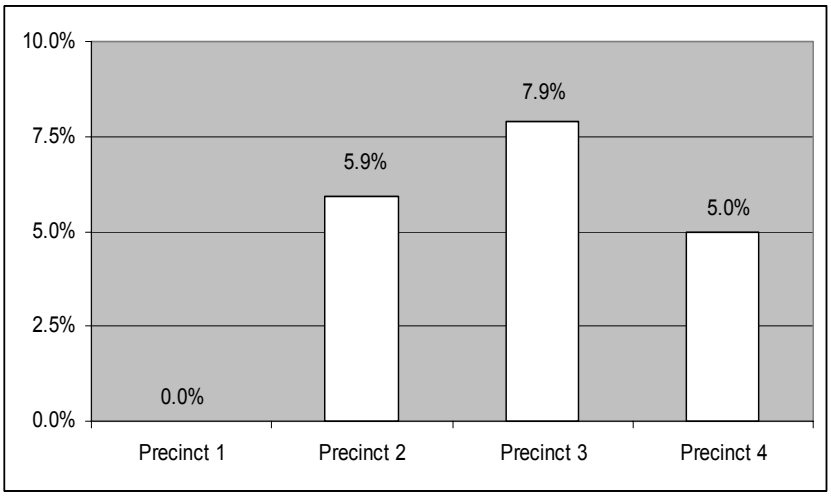


Figure A-8. Suspect Resisted

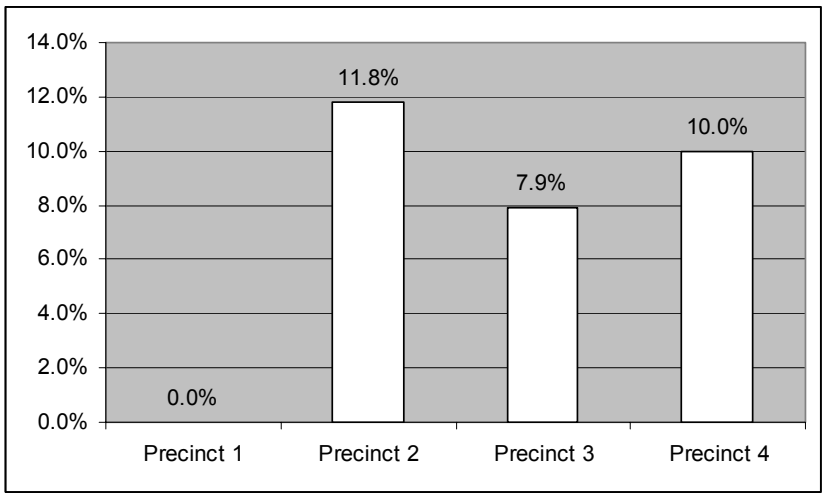


Figure A-9. Suspect Frisked

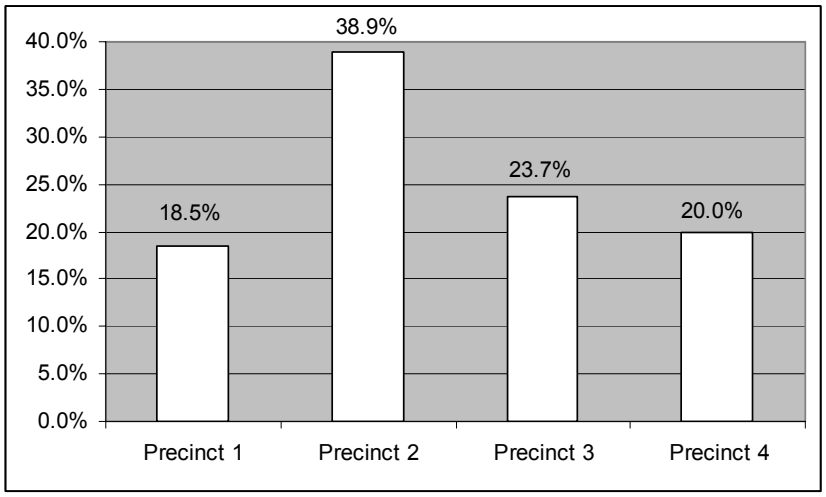


Figure A-10. Suspect/Vehicle Searched

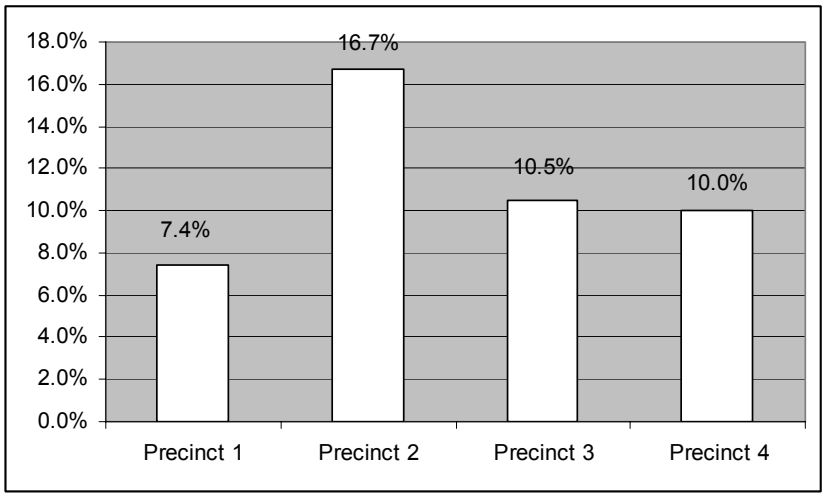


Figure A-11. Warning Issued

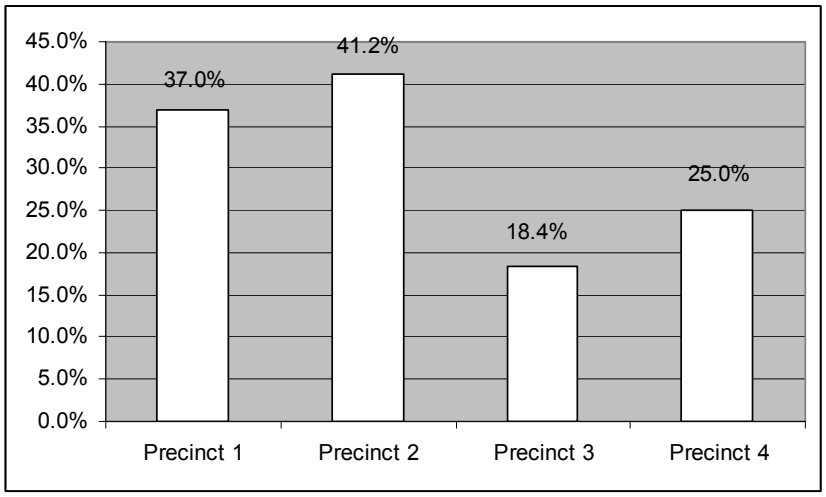


Figure A-12. Suspect Issued Ticket

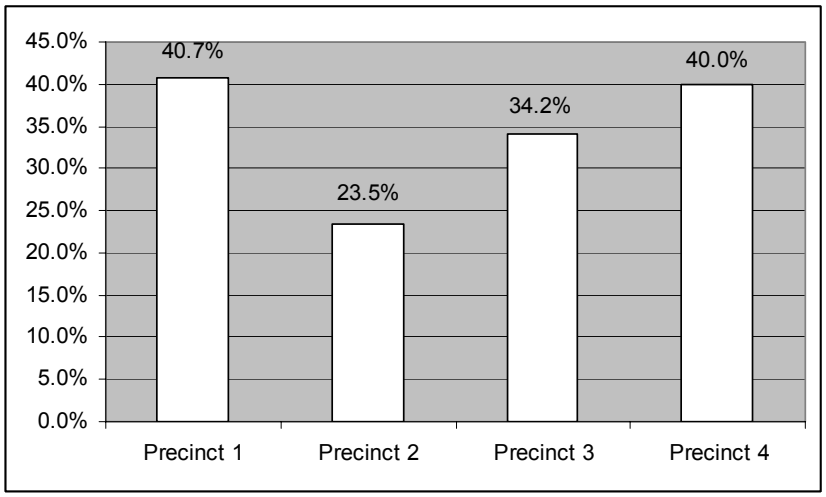
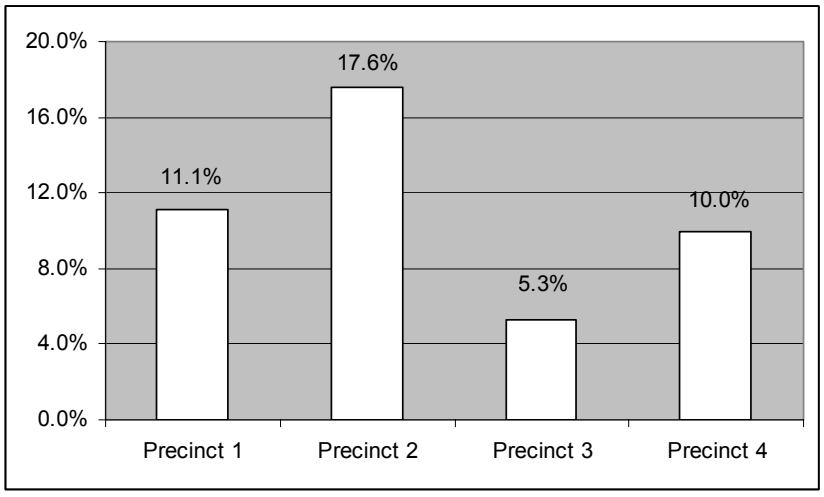


Figure A-13. Suspect Arrested



Factors Associated with the Decision to Stop a Suspected Individual/Vehicle

Tables A-10 to A-13 present the results of crosstabular analyses of the relationship between the decision to stop an individual/vehicle and many of the variables discussed above. These variables have been categorized as characteristics of the area in which suspicion was formed, characteristics of the day and time when suspicion was formed, characteristics of the suspect, characteristics of the suspicion, and officer characteristics.[1] Variables that significantly impact officers' likelihood of making a stop of an individual or vehicle are highlighted and presented in bold font.

[1] Crosstabular analyses were not performed for the suspect characteristics of age, class, and alcohol/substance use, or for the officer characteristics of age or tenure, as their level of measurement (i.e., interval) violated the assumptions necessary to perform these analyses.

Table A-10. Precinct 1: Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle (Direction and Significance)

Variable	% Resulting in Stop	Significance Level
Type of Area		
Commercial	66.7%	.460
Residential	25.9%	
Secluded	0.0%	
Other	7.4%	
Racial Makeup of Area		
African-American	73.1%	.194
White	0.0%	
Other	26.9%	
Trouble Spot		
Yes	57.7%	.492
No	42.3%	
Dark at Time of Stop		
Yes	44.4%	.563
No	55.6%	
Stop Occurred on Weekend		
Yes	33.3%	.079
No	66.7%	
Gender		
Male	70.4%	.080
Female	29.6%	
Race		
African-American	44.4%	782
Other	55.6%	
Reason for Forming Suspicion		
Appearance	0.0%	.159
Behavior	92.6%	
Time and Place	0.0%	
Information	7.4%	
Gender		
Female	5.0%	.692
Male	95.0%	
Race		
Other	50.0%	.590
White	50.0%	

Education		
High School degree	70.0%	.907
> H.S. diploma	30.0%	

As shown in Table A-10, none of the factors examined here significantly influenced whether officers in Precinct 1 would make stops based on suspicion.

Table A-11. Precinct 2: Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle (Direction and Significance)

Variable	% Resulting in Stop	Significance Level
Type of Area		
Commercial	38.9%	.236
Residential	44.4%	
Secluded	11.1%	
Other	5.6%	
Racial Makeup of Area		
African-American	61.1%	.763
White	0.0%	
Other	38.9%	
Trouble Spot		
Yes	44.4%	.630
No	55.6%	
Dark at Time of Stop		
Yes		
No		
Stop Occurred on Weekend		
Yes	33.3%	.101
No	66.7%	
Gender		
Male	83.3%	.648
Female	16.7%	
Race		
African-American	88.9%	.126
Other	11.1%	
Reason for Forming Suspicion		
Appearance		
Behavior		
Time and Place		
Information		

Characteristics of Officer		
Gender		
Female	5.6%	.342
Male	94.4%	
Race		
Other	55.6%	.200
White	44.4%	
Education		
High School degree	44.4%	.105
> H.S. diploma	55.6%	

In Precinct 2, two variables were significantly related to the likelihood that officers would make a stop based on suspicion. First, officers were significantly more likely to make a stop when it was dark at the time they became suspicious of an individual/vehicle. Second, the likelihood that a stop would be made varied according to the reasons officers had for forming suspicion. Officers were most likely to make a stop when they based their suspicion on the individual's behavior and least likely to make a stop when they became suspicious of an individual/vehicle based on their appearance.

Table A-12. Precinct 3: Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle (Direction and Significance)

Variable	% Resulting in Stop	Significance Level
Type of Area		
Commercial	50.0%	
Residential	44.7%	.129
Secluded	2.6%	
Other	2.6%	
Racial Makeup of Area		
African-American	55.3%	.298
White	2.6%	
Other	42.1%	
Trouble Spot		
Yes		
No		

Characteristics of Day and Time		
Dark at Time of Stop Yes No	 34.2% 65.8%	 .360
Stop Occurred on Weekend Yes No	 23.7% 76.3%	 .135
Gender Male Female	 73.7% 26.3%	 .195
Race African-American Other	 81.6% 18.4%	 .223
Reason for Forming Suspicion Appearance Behavior Time and Place Information	 2.6% 76.3% 7.9% 13.2%	 .054
Gender Female Male	N/A (all officers were male)	N/A
Race Other White		
Education High School degree > H.S. diploma	 36.8% 63.2%	 .331

Two variables significantly influenced the likelihood that officers in Precinct 3 would make a stop of a suspected individual/vehicle. First, officers were significantly less likely to make a stop when they formed suspicion in areas they considered to be "trouble spots." Second, officers who were members of a minority group were significantly more likely to make stops than their white counterparts.

Table A-13. Precinct 4: Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle (Direction and Significance)

Variable	% Resulting in Stop	Significance Level
Type of Area		
Commercial	40.0%	.590
Residential	40.0%	
Secluded	0.0%	
Other	20.0%	
Racial Makeup of Area		
African-American	15.0%	.661
White	10.0%	
Other	75.0%	
Trouble Spot		
Yes	50.0%	.590
No	50.0%	
Dark at Time of Stop		
Yes	10.0%	.567
No	90.0%	
Stop Occurred on Weekend		
Yes	5.0%	.692
No	95.0%	
Gender		
Male	45.0%	.375
Female	55.0%	
Race		
African-American	45.0%	.283
Other	55.0%	
Reason for Forming Suspicion		
Appearance	10.0%	.245
Behavior	85.0%	
Time and Place	0.0%	
Information	5.0%	
Gender		
Female	5.0%	.692
Male	95.0%	
Race		
Other	50.0%	.590
White	50.0%	

Education High School degree > H.S. diploma	 70.0% 30.0%	 .907

None of the variables examined here significantly influenced the decision to stop a suspect for officers in Precinct 4.

Ch. 4 Conclusions and Policy Implications

Research on the police has relied on observational strategies to develop rich and important information on the behavior of the police and the public they serve in a natural setting. Our study with the Savannah, Georgia, Police Department is based upon the ideas and data-collection instruments developed in the earlier research efforts and exemplified in the POPN study (Mastrofski et al., 1998). One of the major differences between the two sets of research is the selection of police-citizen interactions used for analyses. While all police-citizen interactions were used in POPN, we decided to limit our analytical sample to those discretionary actions taken by the police when forming suspicion and stopping citizens. In other words, our units of analysis are the formation of officer suspicion and the stops that follow the formed suspicion. The purpose of this chapter is to present conclusions from our methodological approach and our data analysis. We will also present the limited policy implications that emerge from our study.

Methodology

The present effort focuses on officer behavior and, where possible, citizen actions. Our approach draws on the various ways researchers have observed the behavior and interaction among actors in various settings. Relying on the general principles of observational research and content analysis, we incorporated Staged Activity Analysis (Cromwell et al., 1991) and Protocol Analysis (Worden and Brandl, 1990) into a hybrid methodology. This approach to collecting the data was successful in that the police accepted the ride-along observers and the method enabled them to establish the rapport necessary to collect the required information. In fact, many observers reported very cooperative relations with the officers. Another goal of the research was to receive comparable cooperation from the citizens who interacted with the police. Unfortunately, our efforts to contact and interview the citizens were less successful than our ability to get information from the police officers. This approach, while difficult to implement, provides an important source of information about police-citizen interactions. Future research

should attempt not only to obtain observational information from both the police officer and citizen but to get both parties' interpretations and impressions of what happened and how it impacted them and their reaction. A good data set, incorporating both points of view, can provide information on possible inconsistencies in how these actors view each other, their behavior, the immediate situation, and the broader environment.

Data Analysis

From our descriptive analyses, several conclusions emerged:

1). Officers formed suspicions quite infrequently. Most officers only formed one suspicion per shift, but the average was 1.3 per shift. It was very unusual for an officer to form more than three suspicions per shift.

2). For the most part officers were forming suspicions using legitimate criteria. In the majority of cases, the officer told the observer that the behavior of the suspect(s) was the primary reason for forming suspicion. An analysis of the observers' descriptions of behavior revealed that the most likely behavioral reason for forming suspicion of an individual/vehicle was a traffic violation (e.g., running a red light, driving with expired plates).

3). Forming a suspicion did not necessarily result in a stop. Stops were made a majority of the time (less than one per shift), however there were instances when continued observation of the suspect(s) convinced the officer that the original concern was unwarranted.

4). While deployment patterns were not part of the analyses, it is likely that they are an important factor in explaining where most suspicions and stops occurred. The characteristics of areas where most suspicions were formed and most stops were made are as follows: the majority of suspicions were formed in residential areas, and the

greatest percentage of stops occurred in commercial areas. While the majority of the suspicions and stops were made in areas not considered particularly dangerous, they did occur in predominantly African-American areas.

5). The demographic characteristics of the citizen about whom officers formed suspicion or who was stopped were young minorities. However, Blacks constituted a slightly higher percentage of suspicions than stops, while whites had the opposite pattern.

6). During the stops, officers acted more positively toward suspects than suspects did towards officers. Only a few of the officers had a negative initial demeanor or acted disrespectfully towards the citizen. However, these suspects were nearly three times more likely than the officers to be negative and twice as likely to be disrespectful at the beginning of an encounter. Suspect and officer demeanor changed at approximately the same rate during their interaction, with half turning more negative and the other half turning more positive. Officers appeared to be responding to the attitude/demeanor displayed by the suspect.

Measuring citizen demeanor is a difficult task that can be affected by numerous factors, including the type of measure, when the behavior is observed, and who assesses the behavior. Although some of our data do not permit definitive statements, they do reveal the complexity of the issue and the need for further research. In this data, it was the officer's evaluation of the citizen's demeanor throughout the encounter that significantly affected the outcome of the stop. According to this measure, citizens being disrespectful were nearly twice as likely to be ticketed or arrested compared to citizens not showing disrespect to the officer.

7). Officers were significantly more likely to make stops when they had formed suspicion on the basis of a suspect's behavior, rather than on the basis of time and place, information or appearance. Suspect characteristics, such as gender, ethnicity, socio-economic status, and age, did not significantly influence the likelihood of a stop after a suspicion was formed. However, non-behavioral suspicions were most common when a suspect and an officer were both Black, and least common when an officer and suspect were white

8). Only two officer characteristics, age and education, were important determinants of the decision to make a stop. Older officers and officers with a high school education were significantly more likely to make stops than younger and more educated officers. Interestingly, white officers were more than twice as likely to issue tickets during their stops as were other officers.

9). Suspects under the influence of alcohol or drugs negatively influenced the interaction and outcome. Suspects under the influence of alcohol or drugs at the time of the stop were significantly more likely to resist the officer, to be frisked, have force used against him/her, to have their vehicle searched, and to be arrested.

10). Most officers reported that they had working rules to help them identify suspicious persons or to determine how to handle a particular situation.

11). While most officer decisions were based on behavioral criteria, decisions based on the non-behavioral criteria were also important. In contrast to officer decisions based on behavioral criteria, the small percentage of decisions based on non-behavioral criteria can be explained by suspect and officer demographic variables. For example, officers were

significantly more likely to form a non-behavioral suspicion when the suspect was Black and when the officer had longer tenure.

12). Most of the stops were routine and resulted in no consequence for the citizen. When there was a consequence, the most common was a warning or ticket. In less than 10% of the stops an arrest was made. Further, coercion against the citizen was seldom used and citizen resistance was uncommon. Frisking or searching suspects was more common than coercion or force, but most often was subsequent to an arrest or due to suspect resistance. Coercion was never used unless the suspect offered resistance.

Policy Implications and Future Research

This final section addresses the policy implications derived from our findings and makes suggestions for future research. Our findings have important policy implications regarding the management of police officer discretionary time, and the data-driven decision making skills of the officers. The policy implications of our research are in many ways similar to findings in other observational studies. Engle and Worden (2003) report that changing police officers' attitudes alone will not change their behavior on the street. It is clear that if changes are desired, managers must provide training to educate officers about their actions. This training must be supported by close supervision to assure that the desired behavior is taking place, and accountability to assure officer compliance.

In the analysis of our observations, very few problematic attitudes and behaviors surfaced. As in any observational research on the police, most of the officers' time was spent in routine activities with routine outcomes. It is from the few problematic

interactional patterns that our policy suggestions are based. The Savannah study failed to uncover serious or major flaws in how the police managed their interactions with citizens. However, in any organization, there is always room for improvement.

Since officers form suspicions relatively infrequently, it may be necessary to create a workload analysis to determine how officer discretionary time is used. We did not record the times officers spent responding to radio calls and other service so it may be that very little time exists for discretionary stops and the formation of suspicions. However, managers may be able to encourage officers to use their available time more efficiently, effectively, and productively.

As our research is the first to address the formation of suspicion, it is difficult to determine the value of these decisions. Our data show that not all suspicions resulted in an official response. This could mean that some of the criteria used by officers to form suspicion are proper and valuable while other criteria are unfounded and inefficient. Clearly, more attention and research needs to be done in this area, but managers and officers can benefit from our limited understanding of the process of forming suspicion and making stops. Once this area of research has matured, managers will be able to develop data-based training to assist their officers in becoming more effective.

We learned that citizens are more likely than officers to have a negative demeanor and show disrespect to an officer at the beginning of an encounter. We also learned that officers often react to a citizen's negativity. It is important to train, supervise, and reinforce officers' understanding of these interactions. In other words, officers should be prepared to deal effectively with a negative attitude from a citizen, rather than allowing the citizen's disrespect to pull them into a downward spiral.

Officers formed the majority of their suspicions based on citizen behavior. However, there were many times when officers became suspicious about citizens based on non-behavioral criteria. Since these are the most problematic, officers need to understand their likely outcome and consequences of such actions. In other words, they must be made aware that people are more likely to be angry and resentful of the police officer who becomes suspicious without behavior cues. Training and role-play activities could help officers and managers understand the process of forming suspicion. In addition, special attention should be focused on managing intoxicated citizens as they the most likely to have a bad attitude and resist officer's actions.

We also learned about the prevalent nature of working rules that govern officer behavior. Police managers must be aware of these "rules" and make sure that they are consistent with both departmental policy and its mission statement.

Citizens should be educated not to have an "attitude" when they are in contact with the police and not to resist their orders. Rather than put the police in a position to coerce or use force, citizens should limit their questioning of police authority during their interactions and comply with reasonable police orders. Citizens who feel that the police have abused their authority or have used inappropriate language or force should file formal complaints against officers in the appropriate forum.

Future Research

Improving observational research of the police has been a goal of everyone who has attempted to observe and classify police behavior. Notably, Mastrofski and Parks (1990) suggest that researchers include the cognitive decision processes police use in exercising their discretion. They state:

The method we propose would direct quantitative behavioral research toward theory more closely wedded to the officer's street-level perspective. We thus advocate the merging of what have been two parallel but often separate modes of inquiry: the behavioral and quantitative with cognitive and mostly qualitative. Focusing on the decision maker enables researchers to see more clearly the ways in which the numerous situational, organizational, individual and environmental factors play on the choices made (1990: 492).

Although their plea was made more than a decade ago, their suggestions have not been fully met. Our study of the Savannah police officers addresses many of these issues and incorporates the study of cognitive processes. While we were able to advance the methodology, there remains much work to be done in this field of study. For example, future research should attempt not only to obtain process data from both the police officer and citizen but also to study both parties' interpretations of the events in order to show the reactions of each impacted the other. Similarly, future research can address possible inconsistent versions of the same event.

While it is always important to improve or make more successful our established observational methodology, it is also necessary to open new avenues of investigation. As we and other researchers have discussed, establishing contact and building rapport with police managers and officers is difficult but can be done well. There are always ways to improve and make more effective our current observational techniques. In the social sciences, for example there are new approaches being developed and tested. It is important that we all are aware of these innovative techniques and ideas and that we integrate them into our research designs whenever possible.

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