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EXPLORING THE USE OF FORMAL AUTHORITY IN POLICE-CITIZEN ENCOUNTERS

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EXPLORING THE USE OF FORMAL AUTHORITY IN POLICE-CITIZEN ENCOUNTERS

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ABSTRACT

The empirical research on police-citizen encounters has treated arrest as a high degree of social control by the police and, for the most part, arrest outcomes are compared to an officer doing “nothing.” The coercive actions officers take to deal with citizens are not necessarily limited to a single set of dichotomous choices: the no-arrest/arrest outcome measure. Unfortunately, the extant research in this area rarely examines the exercise of formal authority that is more than “nothing” but less than arrest. This dissertation examined how individual, situational and community level correlates commonly used in policing research influence the quantity of formal authority used in police-citizen encounters.

Using data from systematic social observations of police-citizen encounters, this dissertation explores the actions that officers take against citizens that are quantifiable and that lie somewhere between doing “nothing” and an officer making an arrest. The dependent variable is a count variable based on an eight-item Formal Authority Scale (FAS) created specifically for this research. These data were analyzed using Poisson regression models. Results indicate that situational level correlates, specifically the legal characteristics of an encounter, influence the quantity of formal authority police exercise against citizens. However, individual and community level correlates have little effect on police use of formal authority in police-citizen encounters. The findings of this dissertation indicate that police officers take informal and formal actions against citizens that are less than arrest (that officers do more than “nothing”), and that many of the correlates used in studies that focus on arrest outcomes also influence outcomes that do not involve arrest.
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CHAPTER 1: INTRODUCTION

In general, research that explores outcomes in police encounters with citizens is grounded in the sociological perspective on social control (Black, 1980; Worden, 1989; Klinger, 1996a). Police actions like making official reports, issuing citations or executing full-custody arrests can and have been used to measure social control and the exercise of formal authority (Black, 1976; Black, 1980; Worden, 1989; Klinger, 1996). The empirical research on police behavior has for the most part adopted the premise that, except for the use of lethal force, an arrest is the highest degree of formal authority an officer can exercise against a citizen. Outcomes of arrest represent more social control by the police than no arrest (Black, 1976; Black, 1980). This dissertation is another step in the rich tradition of research that seeks to understand how police officers use their powers in encounters with citizens. More specifically, this research focuses on how officers exercise their formal authority and the correlates to the outcomes of encounters between the police and citizens (Wilson, 1968).

QUANTIFICATION OF FORMAL AUTHORITY IN POLICE-CITIZEN ENCOUNTERS

Empirical research has provided overwhelming support to the notion that officers have discretion and they do exercise it in the field, and that both legal and extralegal criteria can influence the outcomes of police-citizen encounters. In addition, widespread contemporary policing strategies like community policing (COP), and to a lesser extent problem-solving

---

1 Arguably, the use of force, in particular lethal force, represents the ultimate degree of formal authority the police could exercise against a citizen (Bittner, 1970; Black, 1980). Their capacity to use coercive force against citizens is part of the backbone of police authority (Bittner, 1970; Klockars, 1985). Interpretations of the prevalence of officer use of force against citizens are contingent upon how use of force is defined. When less-than-lethal force actions such as verbal threats, pat-downs and handcuffing are included in definitions of use of force, officer use of force is not a rare event (Garner, et al., 1995; Klinger, 1995; Terrill, 2001). Police use of lethal force, however, is a rare occurrence (Fyfe, 1988; Terrill, 2001). Nevertheless, this dissertation does not focus on or address the use of physical force (nonlethal or lethal) as the exercise of formal authority.
policing (POP), emphasize police-initiated contact with citizens and encourage increased exercise of discretion by officers in the field.

Contemporary policing strategies encourage officers to take the social context of the situation into account when they exercise their formal authority (something that has probably always been the case, but is articulated more openly than before) (Black, 1976; Black, 1980; Mastrofski, et al., 1995). More importantly, contemporary policing strategies generally encourage officers to make full-use of arrest and non-arrest options in dealing with problems and citizens (Mastrofski, et al., 1995; Mastrofski, et al., 2000; Novak, et al., 2002). Officers are encouraged to focus on incivility and disorder, and to employ arrest and non-arrest interventions that address the underlying problems of incidents brought to the attention of the police (Kelling & Moore, 1988; Mastrofski, et al., 1995).

Outcome measures that focus on arrest may not provide a full picture of how officers exercise their formal authority with citizens, and citizen perceptions of police behavior as overly coercive or “heavy-handed” may be supported through an examination of the use of formal authority that is less than arrest (Browning, et al., 1994). In other words, defining and researching coercive control or formal authority exclusively through no-arrest/arrest outcomes sheds light on only two aspects of social control by the police: the execution of a full-custody arrest (doing “something”) or the disregard of problematic or criminal situations (doing “nothing”). The traditional concerns over how the police use their powers, changes in policing strategies and the state of the research on outcomes in police-citizen encounters make understanding officer use sanctions that lie in-between doing “nothing” and making an arrest an important issue worthy of study.
**Defining Formal Authority**

Within their prescribed roles by the state as keepers of the peace and enforcers of law, the police not only have the responsibility to maintain order and enforce the law, they are empowered to carry out activities that facilitate law enforcement and peacekeeping (Bittner, 1967; Klockars, 1985; Burton, et al., 1993). While going about their routine functions of peacekeeping and law enforcement, the police embody the concept of government social control. As conceptualized by Black and others, the actions police officers take to fulfill these roles can provide measurable applications of law and the exercise of formal authority (Wilson, 1968; Black, 1976; Black, 1980; Klinger, 1996a).

Following Black’s conceptualization of law as governmental social control, the terms “law” and “formal authority” are synonymous in that they refer to the degrees of social control an officer uses in the process of dealing with citizens (Black, 1980). Therefore, the outcomes of actions by the police in their encounters with citizens can be understood as the exercise of formal authority, as state authorized social control. No matter how short-lived or trivial the interaction between a police officer and citizen may seem, regardless of the eventual outcome of the encounter, governmental social control (law) is exercised whenever police officers and citizens interact in order maintenance and law enforcement capacities (Black, 1980; Worden, 1989; Klinger, 1996a). In accordance with this conceptualization of the police as representatives of governmental social control, police actions toward citizens represent the exercise of an officer’s formal authority.

**Quantifying Police Behavior as Formal Authority**

The type and number of informal and formal regulations applied to a citizen or a situation can be measured as formal authority acts (Black, 1976; Black, 1980). Officers can take informal
courses of action (such as provide suggestions, verbal warnings, threats or commands) to address citizen behaviors, which are inherently supported by their state granted powers. The police can also take more formal actions (like filing an official report, issuing a citation or making a full-custody arrest). The distinction between informal and formal acts by the police is that formal acts bring the citizen and their conduct to the attention other agencies or institutions and they often have legal or other consequences, while informal actions do not (Black, 1976; Black, 1980).

According to Klinger, “Understanding all police conduct as formal authority and thinking of specific actions in terms of the level of formal authority they mobilize provide the conceptual basis for quantifying law in police citizen encounters” (1996a: 398). The legal authority given to police officers, combined with the discretionary nature of street-level policing activities, gives officers the ability to ask questions, gather information about citizens, give citizens orders, search citizens, and render sanctions that involve other mechanisms of social control through the filing of reports, the issuance of a citation, and/or making a full-custody arrest (Goldstein, 1960; Wilson, 1968; Lipsky, 1980). Respectively, these activities can be viewed as part of a continuum of formal authority with one action representing more social control than the preceding action: an arrest represents the use of more formal authority than a citation, a citation is more than a written report, a written report is more than a verbal warning, etc. (Black, 1980; Klinger, 1996a). The sanctions officers utilize that do not necessarily involve a full-custody arrest, such as ticketing, filing reports, searching, making referrals for services or verbal mediation, can also be used to rank-order degrees of social control and tap variance in the amount of formal authority used in encounters with citizens (Black, 1976; Black, 1980; Klinger, 1996a).
PURPOSE OF THE PROPOSED RESEARCH

Research on officer behavior in police-citizen encounters has for one reason or another been limited to explorations of “nothing” versus “something” dichotomies, usually comparing outcomes of no arrest to outcomes where an arrest is made (Klinger, 1996a). While arrests are the most common research conceptualization of law, it is well acknowledged that an arrest is a rare event (Banton, 1964). Nevertheless, officers take actions against citizens that are measurable and that lie somewhere between outcomes where “nothing” happens and outcomes where an arrest occurs.

The actions officers take to deal with citizens are not necessarily limited to a single set of dichotomous choices. The outcomes of police-citizen encounters are also not necessarily limited to outcomes involving no exercise of formal authority versus full custody arrests. The purpose of the proposed research is to understand how police officers handle citizens by quantifying the various outcomes of police-citizen encounters that range from an officer doing “nothing” to an officer making an arrest (Black, 1980). By examining the distinct actions officers take against citizens our knowledge of how police officers exercise formal authority will increase.

The proposed study will diverge from the general course taken by much of the previous research on police-citizen encounters in an important way: the quantification of formal authority. Utilizing research by Black (1976; 1980), Klinger (1996a), and others the proposed research will attempt to do the following:

1) Provide an alternative to the no-arrest/arrest outcome measure commonly used in research on the application of law in police-citizen encounters.

2) Quantify the amount of formal authority used against citizens by developing an outcome measure, a formal authority scale (FAS), that rank-orders several distinct police actions from less to more authority. As they
are measured on the proposed formal authority scale, all police actions taken against a citizen in an encounter will be summed to create a count dependent variable: the number of formal authority scale (FAS) actions taken.

3) Examine how individual, situational and community level correlates influence the quantity of formal authority used in police-citizen encounters.

Using data collected through systematic social observations of police officers assigned to traditional and community policing activities in the City of Cincinnati, the proposed study will attempt to quantify formal authority through examining police actions that have been largely ignored in policing research (i.e., verbal or written warnings, searches, citations, etc.). The focus of the proposed study is not on police discretion per se; rather, it is a study of how the various outcomes of police-citizen encounters can be used to measure formal authority. This dissertation will focus on quantifying formal authority and identifying the correlates of the use of formal authority.

Observational studies of the police are the primary data source used in research on police discretion and research that quantifies law in police citizen encounters. Such studies allow researchers the opportunity to collect data on actions and events that typically do not show up in official reports or statistics and to measure quantities of law that are less than arrest. Nevertheless, research that utilizes observational data on police-citizen encounters has largely been preoccupied with conceptualizing and measuring the use of law through arrest outcomes and with understanding the correlates of arrest outcomes (Smith, 1987; Worden, 1989; Klinger, 1996a).

Low-visibility discretionary police behavior and the degrees of law that officers utilize that are less than arrest have not received a great deal of attention within the empirical research
Researchers have rarely explored outcomes between the decision to do nothing and outcomes where an arrest is made. Moreover, the few studies that have used alternatives to the no-arrest/arrest outcome measure have utilized measures that were nominal in nature or not easily interpretable as ordinal measures (Black, 1980; Sykes and Brent, 1983; Worden, 1989).

THE NEED FOR ALTERNATIVES TO THE NO-ARREST/ARREST OUTCOME MEASURE

In his seminal work on police-citizen encounters (*The Manners and Customs of the Police*), Black explicitly noted that for research to be useful in understanding variance in the quantity of formal authority it must eventually move “beyond the mere identification of differences, or nominal measurement” (Black, 1980: 211). Measurement needs to be more precise; at least ordinal in nature, so that one event or outcome can be rank-ordered as more or less formal authority than another, thereby the magnitude of social control exercised by the police can be more fully appreciated (Black, 1980).

To measure police actions that do not result in arrest as “nothing” compared to a full-custody arrest is misleading because it does not necessarily reflect the view of the individual responsible for exercising social control (Brown, 1981). The arrest function does not accurately reflect what officers do when they encounter every citizen that they could arrest. Moreover, the lack of an arrest outcome does not automatically mean that the police did nothing to a citizen or nothing of social or legal consequence to the citizen.

Officers make willful decisions below the threshold of arrest that can be punitive and/or have legal consequences (Sykes & Brent, 1983). These include decisions to ignore violations, issue verbal warnings or commands to citizens, and to take more formal actions like issuing
citations. When an arrest could be made in a given situation the only argument among policemen may be, according to Brown (1981), whether the decision not to arrest is effective or appropriate in handling that particular situation, or whether the outcome is an appropriate exercise of social control. An officer may regard a non-arrest disposition as appropriate given the situational exigencies of the encounter, even when arrest is a legally appropriate option (Klockars and Mastrofski, 1991; see also Bittner, 1970; Bittner, 1974; Brown, 1981).

**Quantifying Officer Behavior Through a Formal Authority Scale (FAS)**

In his 1996 article on the quantification of law in police-citizen encounters, Klinger criticized the state of the research conducted by police scholars as failing to address this fundamental aspect of Black’s theory of law as a quantifiable variable. According to Klinger (1996a), much of the research that has advanced our knowledge of police discretion and the outcomes of their encounters with citizens shows that Black’s call for more precise measurement of formal authority “fell largely on deaf ears,” as the majority of studies rely on a no-arrest/arrest dichotomous outcome measure (Klinger, 1996a: 391).

Klinger (1996a) attempted to address the dearth of alternatives to the prevalent no-arrest/arrest measurement dichotomy in policing by rank-ordering distinct police actions into what he termed a formal authority scale (FAS). The five points of Klinger’s scale ranged from exercises of formal authority as low as police gathering information from a citizen (1 point) to a high where officers made an arrest (5 points). In order of descending severity, those actions were whether: a citizen was taken into custody, a police report was taken, the officer imposed a solution to the matter, a discussion or suggestion of actions took place, or if the officer gathered limited information with no further action (see Klinger, 1996a: 399).
To date, Klinger’s research is the only published study that specifically addresses this issue. Klinger acknowledged his work was the first step towards more precisely quantifying formal authority in police-citizen encounters in accordance with Black’s treatise on the need for more refined measurement, and that there remains room for refinement of scales to measure formal authority (Klinger, 1996a). There are no other published studies dedicated to addressing Black’s call for better measurement in police-citizen encounters and there are no published responses to Klinger’s research on the matter. The lack of attention to the quantification of formal authority that does not involve arrest presents a gap in our knowledge of policing that remains to be filled, a gap that limits the development of a complete theory of police behavior. The proposed research seeks to help fill this gap between sociological theory and observational police research in order to better understand the influences of legal and extralegal criteria on outcomes in police-citizen encounters.

**CHAPTER SUMMARY**

In summary, the proposed study will synthesize the research of Black, Klinger, and others to explain variance in the quantity of legal social control used in police-citizen encounters (Black, 1976; Black, 1980; Worden, 1989; Klinger, 1996a). This will be accomplished through the development of a dependent variable—a formal authority scale (FAS) as modeled by Klinger—that will explore the quantity of formal authority used against citizens (Klinger, 1996a). The proposed formal authority scale will provide an alternative to the more prevalent no-arrest/arrest dichotomy used to measure outcomes in police-citizen encounters (Klinger, 1996a). The proposed formal authority scale will be used to examine data collected through systematic social observations of police officers assigned to traditional and community policing.
activities in the City of Cincinnati. By incorporating degrees of law that were not addressed in Klinger’s research, the formal authority scale developed for this study will attempt to more accurately and precisely quantify distinct police actions that are less than arrest. Furthermore, the proposed FAS will measure the total amount of coercive control police use against a citizen in an encounter.

OUTLINE OF STUDY

Chapter 2 will discuss the theoretical framework to be used in the proposed study: Black’s theory of the behavior of law. It will review the existing literature on alternatives to the no-arrest/arrest outcome measure and previous research on officer decision making. Chapter 3 provides a description of the proposed methods to be used in this research. A description of the proposed data sources, research questions guiding the study, measurement of the independent variables, and the data points of the dependent variable, the formal authority scale (FAS), will be discussed. The analysis of individual, situational and community level correlates will be presented in Chapter 4, followed by a discussion of the results and the implications of the study’s findings (Chapter 5).
CHAPTER 2: LITERATURE REVIEW

As outlined in Chapter 1, using data collected through systematic social observations of police officers assigned to traditional and community policing activities in the City of Cincinnati, the proposed study will attempt to quantify formal authority at levels that have been disregarded in existing policing research (i.e., verbal or written warnings, citations, etc.). This research builds on Black’s (1976; 1980) theory that formal authority is a quantifiable and that all actions taken by the police can be measured as less or more social control.

This chapter first presents a summary of the extant research that has utilized polytomous response variables to quantify law in police citizen encounters. Particular attention is paid to outcome measures that have been ordinal (not nominal) in nature and the rationale behind previous ordinal ranking schemes. Following will be a detailed discussion of the polytomous response variable that will be used in the proposed research. Through this body of research, a formal authority scale (FAS) will be developed that rank-orders various police actions from more to less formal authority, according to the potential severity, intrusiveness and formality of the police action.

This chapter concludes with a review of the extant research on the correlates of officer behavior in police-citizen encounters. These correlates will be reviewed at three different levels: individual level factors, situational level factors, and community level factors. The object of these discussions is to present an overview of the extant research on police-citizen encounters as it pertains to the proposed research. Moreover, while there is a large body research on these correlates and decision making in police-citizen interactions, these factors may exert different influences on an outcome measure that quantifies law more precisely than no arrest/arrest outcome measures.
LIMITATIONS OF EXISTING RESEARCH ON POLICE-CITIZEN ENCOUNTERS

Research involving police-citizen encounters has generally embraced the concept that an arrest is an expression of more formal authority than a non-arrest outcome. However, the extant research in this area of policing has largely ignored the full-range of what officers can do, and actually do, when they exercise their formal authority against citizens (Bayley, 1986). Perhaps in his summary of previous research on the discretionary context of policing, Worden (1989) best describes how officers exercise formal authority:

“[Policing] is for the most part extralegal, for while officers (often) work within the constraints of the law, they seldom invoke the law in performing police work; informal action, with or without coercive threats, is commonplace, and hence the dimensions of police discretion are not delineated only by officer’s authority to apply legal sanctions.”

Quantitative indicators of formal authority in such encounters have for the most part been limited to “mere identification of differences, or nominal measurement” (Black, 1980: 211). According to Black (1980) and researchers like Worden (1989) and Klinger (1996a), the issue in quantifying social control in police-citizen encounters is not the use of dichotomous outcomes, but rather the reliance on limited dichotomies that do not address the full-range of actions used against citizens. Police behavior is often classified into simple dichotomies where “one event is ranked as less or more law than a second event,” such as non-arrest versus arrest or no traffic citation versus traffic citation (Black, 1980: 211). Black clearly articulates how the dichotomous representations of less and more social control typically used by researchers could be used to quantify the exercise of formal authority with more precision:
“It should be recognized, however, that paired comparisons of this kind can provide the basis for more elaborate scales of an ordinal nature. Thus, for instance, a scale of severity can be constructed for a number of punishments by comparing one to the next until all are ranked into a series from more to less law” (Black, 1980: 211).

With the exception of a handful of empirical studies that have attempted to move beyond dichotomous outcome measures (Black, 1980; Sykes and Brent, 1983; Bayley, 1986; Smith, 1987; Worden, 1989; Klinger, 1996a), Black’s suggestions for more comprehensive quantification of formal authority appear to have gone unnoticed by policing scholars (Klinger, 1996a).

**ALTERNATIVES TO THE DICHOTOMOUS [NO-ARREST/ARREST] OUTCOME MEASURE**

The dependent variables used in policing research since Black’s theory was promulgated have largely remained dichotomous. Consequently, we are left with a gap between “nothing” and “something” in our knowledge on police behavior. The alternative strategy of choice for quantifying police actions that are more than nothing and less than arrest appears to be the development of outcome measures that are nominal in nature. A prime example of this is the outcome measures that are often used in research on how police handle disputes or domestic disturbances.

Empirical research on police responses to disputes between citizens, in particular domestic disputes, has recognized that arrest is but one option available to officers in handling the situation. Officers can and do exercise their formal authority to mediate the conflict or
separate those in conflict (Black, 1980; Sherman and Berk, 1984; Worden and Pollitz, 1984; Smith, 1987; Worden, 1989). When an officer uses his or her formal authority to address or change citizen behavior by mediation or separation “something” has been done. It is generally accepted that, in comparison to an arrest, this “something” represents a different degree of social control. Unfortunately, this strategy still limits our ability to appreciate various police actions and outcomes in police-citizen encounters as more or less control.

Nominal outcome measures can enhance our knowledge of police behavior in that they acknowledge the presence of police discretion and they highlight the fact that officers’ use a variety of tactics other than ignoring citizen behavior or arresting someone. Examples of tactics or outcomes other than nothing or arrest include verbal warnings (via suggestions, requests, threats or commands), filing official reports regarding citizen behavior, mediation (counseling), and the removal or separation of suspects from conflicts or settings where the individual is part of the problem officers are attempting to address. Nominal outcome measures of police behavior can be used to understand differences in the quantity of formal authority exercised. However, they usually inform us more about outcomes that are different in kind than they do about differences in severity.

EXISTING RESEARCH UTILIZING ORDINAL POLYTOPHOMOUS RESPONSE VARIABLES

The following is a review of research that focuses on studies that have utilized poltomous response variables that go beyond arrest versus no arrest outcomes, some other dichotomy, or nominal outcome measures. Specifically, studies that have been in one-way or another ordinal in nature are highlighted (Black, 1980; Sykes and Brent, 1983; Worden, 1989;
Klinger, 1996a). Table 2.1 provides a brief description of previous studies that utilized ordinally measured alternatives to the no arrest/arrest outcome measure.

<table>
<thead>
<tr>
<th>Study</th>
<th>Alternative Outcome Measure</th>
<th>Level of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black (1980)</td>
<td>Provides a six-step scale for the application of penal social control rank-ordered by severity of coercive control. In addition, provides a six-fold nominal indicator based on Black’s theory of the quality (styles) of law.</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Sykes and Brent (1983)</td>
<td>Provides a nine-step scale rank-ordered by the relative severity of the outcome for the suspect.</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Worden (1989)</td>
<td>Provides a five-step scale rank-ordered by the severity of the outcome in traffic stops. In addition, provides a four-fold nominal indicator of actions taken in interpersonal disputes, involving 16 possible permutations within the four outcome measures.</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Klinger (1996a)</td>
<td>Provides a five-step scale rank-ordered by the amount of formal authority officer’s use in interpersonal disputes between citizens.</td>
<td>Ordinal</td>
</tr>
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</table>

**Black (1980)**

In his 1980 study of police behavior in settling disputes among citizens, Black utilized a six-fold nominal indicator to quantify the observed styles of social control officers employed against citizens. Black ranked the styles of social control by how frequently officers used tactics that fell within aspects of his own theory on the behavior of law (Black, 1976). In order of frequency, not severity, Black noted that officers dealt with citizens in conciliatory, penal, therapeutic, and compensatory styles of control, respectively. Officers took actions involving two additional styles: “preventive actions” and a residual category of “other,” for a small number of police behaviors that did not fall within one of the aforementioned styles (Black, 1980).
With regard to the penal style of control, Black ranked six police actions in order of severity based on how legalistic and coercive officers were towards citizens. In order of descending severity, those actions were whether: a full-custody arrest was made, orders to leave a setting were given, threats of arrest were made, citizens were scolded or admonished, officers provided advice on resolving the dispute, and “other” actions including officers doing “nothing” (Black, 1980). Black’s ranking scheme of the penal style of control integrated law enforcement and peacekeeping actions into a scale that provided researchers with an example of a more sophisticated outcome measure for approaching the quantification of law. Table 2.2 provides a summary of the ordinal ranking scheme used by Black and others.

**Sykes and Brent (1983)**

In their efforts to analyze influences on how police officers and citizens interact with each other during encounters and the outcome of those interactions, Sykes and Brent developed a nine-step scale rank-ordered by the relative severity of the outcome for the citizen suspected of wrongdoing (1983) (see Table 2.2). Sykes and Brent created a dependent variable that measured “the relative severity of outcome for the suspect” (1983: 216). This measure was a step forward in the recognition that no arrest/arrest outcome measures oversimplify the concept of police discretion and how it is exercised. However, several issues with Sykes and Brent’s outcome measure limit its utility for quantifying formal authority.

One problem with Sykes and Brent’s polytomous response variable is that it does not provide clear explanations for the categories of the outcome measure. For example, it is unclear what type of police actions would appropriately be categorized as “no resolution” or “problem resolved through the interaction itself.” This makes it difficult to understand the relationship between police actions and the measurement categories (Sykes and Brent, 1983; Klinger, 1996a).
Table 2.2 - Description of Previous Alternative Ranking Schemes

<table>
<thead>
<tr>
<th>Rank</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>6</td>
<td>Arrest</td>
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<tr>
<td>5</td>
<td>Order Or Remove From Setting</td>
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<tr>
<td>4</td>
<td>Threaten Arrest</td>
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<tr>
<td>3</td>
<td>Scold Or Admonish</td>
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<tr>
<td>2</td>
<td>Ask Or Advise To Leave Setting</td>
</tr>
<tr>
<td>1</td>
<td>Other</td>
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</tbody>
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<thead>
<tr>
<th>Rank</th>
<th>Description</th>
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<tbody>
<tr>
<td>9</td>
<td>Arrest For Felony</td>
</tr>
<tr>
<td>8</td>
<td>Arrest For Misdemeanor</td>
</tr>
<tr>
<td>7</td>
<td>Punitive Ticket</td>
</tr>
<tr>
<td>6</td>
<td>Imposed Alternative To Arrest When Arrest Was Possible</td>
</tr>
<tr>
<td>5</td>
<td>Negotiated Alternative To Arrest When Arrest Was Possible</td>
</tr>
<tr>
<td>4</td>
<td>Problem Resolved Through The Interaction Itself</td>
</tr>
<tr>
<td>3</td>
<td>Official Police Report</td>
</tr>
<tr>
<td>2</td>
<td>No Resolution</td>
</tr>
<tr>
<td>1</td>
<td>Event Of No Interest To Police</td>
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<table>
<thead>
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<th>Description</th>
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<td>4</td>
<td>Ticket</td>
</tr>
<tr>
<td>3</td>
<td>Written Warning</td>
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<tr>
<td>2</td>
<td>Verbal Warning</td>
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<tr>
<td>1</td>
<td>None</td>
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<table>
<thead>
<tr>
<th>Rank</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Taking citizen into custody (Arrest)</td>
</tr>
<tr>
<td>4</td>
<td>Taking police reports</td>
</tr>
<tr>
<td>3</td>
<td>Imposing solutions</td>
</tr>
<tr>
<td>2</td>
<td>Discussing situations/suggesting action after initial information gathering</td>
</tr>
<tr>
<td>1</td>
<td>Garnering limited initial information about situations but taking no further action</td>
</tr>
</tbody>
</table>

A related problem to this lack of clarity is that the rank ordering of their outcome measure is incoherent. Intuitive logic is the only guide for those seeking to understand their conceptualization of the severity of police actions against citizens. In Sykes and Brent’s ranking scheme, the three categories labeled “problems resolved through the interaction itself,” “negotiated” and “imposed” alternatives to arrest when arrest was possible, are considered to be more severe outcomes for citizens than an “official police report” (Sykes and Brent, 1983;
Klinger, 1996a). This is counterintuitive to the quantification of police actions as law (a la Black’s theory of the behavior of law). An official report establishes a governmental record of the suspect’s behavior; and it is a means of formal processing (Black, 1976; Black, 1980). Logically, any formal action, such as an official report, should be considered more law than any informal action, as informal actions do not bring the matter to the attention of other legal agents. The three measurement categories above an official report in Sykes and Brent’s scale appear to be informal actions, and Sykes and Brent do not explain why those actions represent more severe outcomes for citizens than an official report (see Table 2.2) (Sykes and Brent, 1983; Klinger, 1996a).

A third issue with Sykes and Brent’s dependent variable is that it appears to confound police actions with citizen behavior. Specifically, the commission of criminal acts and the legal seriousness of the suspect’s behavior appear to be intertwined with the dependent variable (police actions) when such factors should be independent of the outcome measure (Klinger, 1994; Klinger, 1996a; Klinger, 1996b). The explanations for categories 5 and 6, “negotiated” and “imposed” alternatives to arrest when an arrest was possible, respectively, suggest that there was a level of evidence that implicated the suspect in an illegal act. Similarly, categories 8 and 9, arrest for a “misdemeanor” or “felony,” respectively, suggest that the outcomes are contingent upon a particular level of evidence or offense seriousness. The general lack of detail behind measurement categories and the definitions of categories 5, 6, 8 and 9, in conjunction with predictors like type of offense (e.g., non-traffic/traffic) and ability to arrest (presumably a measure of the level of evidence or “probable cause”), reasonably brings into question whether criminal conduct and legal seriousness are being double-counted.
**Worden (1989)**

Worden’s (1989) analysis of the impact of situational and attitudinal predictors on police behavior provides a four-fold nominal indicator of actions taken in domestic disputes, involving 16 possible permutations within the four outcome measures. Worden’s approach to examining traffic stop outcomes is more useful to the development of an ordinal measure for the quantification of law. Worden, acknowledging that officers take multiple actions of varying severity against a citizen, provides a five-step scale rank-ordered by the severity of the outcome in traffic stops (see Table 2.2). In order of descending severity, those actions are whether: a full-custody arrest was made, a ticket was issued, a written warning was given, a verbal warning was given, or no action was taken against the citizen (Worden, 1989). Worden’s ranking scheme is similar to Black’s ranking of the penal style of control in that both integrate peacekeeping and law enforcement actions that can be used to illustrate how a more comprehensive outcome measure for approaching the quantification of law can be developed.

**Klinger (1996a)**

To date, Klinger’s (1996a) research on quantifying formal authority in police handling of citizen disputes is the only published research that directly tackles the issues Black (1980) raises regarding the over-reliance on dichotomous outcome measures. More specifically, Klinger provides the only measurement scheme for ranking distinct police actions that explicitly and coherently explains its structure with regard to quantifying formal authority. Klinger developed a five-step formal authority scale (FAS), rank-ordered by the amount of coercive control officers used to address encounters (not suspects) involving interpersonal disputes between citizens (Klinger, 1996a) (see Table 2.2). The outcome measure to be used in the proposed research borrows heavily from the formal authority scale developed by Klinger. By his own admission,
however, Klinger’s formal authority scale leaves room for enhancement (Klinger, 1996a). Due
to differences in the nature of Klinger’s research and the proposed study, the potential limitations
of Klinger’s formal authority scale are best discussed in the context of the development of the
FAS to be used in the proposed research.

**BEYOND KLINGER’S FORMAL AUTHORITY SCALE (FAS)**

In short, the proposed research will utilize contemporary observational data that are more
conducive (than Klinger’s data) to testing theories of law and the development of a more precise
formal authority scale.² The data allow for the development of an outcome measure that captures
the essence of the categories used in Klinger’s five-step FAS and other distinct police actions
that could be measured within this continuum of formal authority actions used in police-citizen
encounters. The proposed FAS will incorporate degrees of formal authority that were
unavailable to Klinger and/or were not adequately taken into account in Klinger’s ranking
scheme. Furthermore, whereas Klinger (1996a) examined encounters with disputants, the unit of
analysis for the proposed study will be police interactions with individual suspects. These and
related issues will result in differences in the operationalization of the formal authority scale to
be used in the proposed research.

**Nature of the Data**

Klinger used his formal authority scale with observational data collected in 1985 and
1986 as part of a study on violence between citizens and police officers, the Metro-Dade (FL)
study (Fyfe, 1987; Klinger, 1996a). Klinger’s formal authority scale was developed after the

² The nature of the data to be used in the proposed research will be discussed in detail in Chapter 3, the Methods
section of the proposal.
Metro-Dade (FL) study was conducted. While the data available to Klinger allowed for the development of a polytomous response variable that captured many of the distinct police actions that reflect different degrees of authority exercised, the data collection effort for the Metro-Data (FL) study was not primarily concerned with quantifying all police actions as formal authority. Certain distinct police actions that could be quantified as degrees of formal authority, like checking citizens for a prior record or conducting physical searches, were not recorded (Black, 1976). Consequently, the construction and operationalization of the formal authority scale was limited in its ability to translate all observable officer behavior into the ranking scheme of the formal authority scale (Klinger, 1996a).

Like Klinger’s formal authority scale, the proposed FAS will be developed around data that were collected as part of a larger study that was not primarily concerned with quantifying all police actions as forms of law. The data to be used in the proposed research were collected from April 1997 to April 1998 as part of an observational study on the street-level police activities of traditional police officers and community-oriented police officers in the city of Cincinnati, Ohio. The data available for the proposed research were collected to capture a wide-range of police encounters and the multiple aspects of those encounters. Unlike the data available to Klinger, which focused on potentially violent encounters and citizens in disputes, the data available for the proposed research involves all police-citizen encounters. Data were collected on violent and commonplace encounters and the routine interactions between the police and citizens.

**Constructing the Proposed Formal Authority Scale (FAS)**

The formal authority scale developed for the proposed research will diverge from Klinger’s ranking scheme in two important ways. First, a potential issue of “point failure” in Klinger’s ranking scheme will be addressed. Issues involving the operationalization of Klinger’s
formal authority scale and the proposed FAS will also be discussed. Second, three distinct police actions that were not utilized in Klinger’s FAS will be incorporated in the proposed formal authority scale.

The following is a discussion of the rationale behind the rank ordering of the proposed formal authority scale. The proposed ranking scheme expands upon the logic and examples provided by previous polytomous response variables (Black, 1980; Sykes and Brent, 1983; Worden, 1989; Klinger, 1996a). The rationale behind the proposed ranking scheme is based on a combination of three criteria:

1. The potential severity of distinct police actions for the citizen;
2. The formal and informal nature of police actions; and,
3. The intrusiveness of police actions into the life of the citizen in the encounter.

There is little question that an arrest is a formal police action that deprives a citizen of his or her liberty and has potentially severe consequences, such as financial penalties and/or prolonged restrictions of liberty. Within the police actions being examined in the proposed research, arrest clearly represents the highest degree of formal authority: Arrest involves a combination of all three of the ranking scheme criteria to their fullest degree. Other police actions are ranked according to how they measure up to these three criteria listed above.

Any formal action, like an arrest or citation, reflects more law than any informal action, such as an officer suggesting a course of action or gathering limited information from a citizen. Accordingly, police actions that are more likely to bring a citizen to the attention of the criminal justice system and/or further into the legal system represent a more severe outcome than actions that do not facilitate further processing by the system. The potential impact of a police action
with regard to other institutions of governmental social control (i.e., other aspects of the legal system) is used to quantify degrees of formal authority.

Police actions that more or less settle the matter between a citizen and an officer on the streets (such as a verbal warning or a field release through a citation) represent less law than settlement in more formal settings (like a police station or the courts). In other words, as the formality of police actions increases, citizen exposure to other penalties or forms of social control also increases.

Lastly, degrees of formal authority are also determined by the intrusiveness of the police action into the citizen’s life. For instance, officers use a variety of tactics to gather information from citizens that will guide their actions during the encounter. Gathering information from a citizen by asking questions is not as intrusive as detaining them to check for prior involvement with the criminal justice system (prior records), and is less intrusive than a physical search of a citizen. Therefore, as the intrusiveness of the action increases, the degree of formal authority exercised increases. The following is a detailed outline of each category of the formal authority scale with elaboration on how the above-mentioned criteria were used to rank FAS actions.

**Full-Custody Arrest**

There is little question among policing scholars that with regard to the quantification of law full-custody arrests represent the highest level of formal authority (Black, 1976; Black, 1980; Sykes and Brent, 1983; Worden, 1989; Klinger, 1996a). Even if only a short-lived intrusion, full-custody arrests deprive citizens of their liberty. When officers make an arrest, the citizen is brought further into the criminal justice system where other legal agents become aware of the citizen’s behavior and are capable of exercising more or less coercive control against the arrested citizen. A full-custody arrest involves a combination of all three of the ranking scheme
criteria to their fullest degree. When a full-custody arrest is made the police action will be
categorized as an 8, representing the highest degree of formal authority on the proposed FAS
(see Table 2.3).

<table>
<thead>
<tr>
<th>Table 2.3 - Description of Proposed Formal Authority Scale (FAS)</th>
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<tbody>
<tr>
<td>Unit Description (In Descending Order of Severity)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Full-Custody Arrest</td>
</tr>
<tr>
<td>Citation Issued*</td>
</tr>
<tr>
<td>Filed (Or Promise To File) An Official Report</td>
</tr>
<tr>
<td>Conducted Physical Search Of Suspect*</td>
</tr>
<tr>
<td>Checked Citizen Criminal History*</td>
</tr>
<tr>
<td>Imposed/Threatened Solutions Or Actions</td>
</tr>
<tr>
<td>Discussed Situation/Suggested Action</td>
</tr>
<tr>
<td>Gathering Limited Initial Information About Situation</td>
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*Police actions not measured in Klinger’s Formal Authority Scale

**Citation Issued (Field Release)**

Receipt of a citation from a police officer, traffic or otherwise, may not be thought of by
most to be an arrest. This may be because when a citation is issued and the police take no other
formal action the citation recipient does not experience even a brief period of imprisonment in a
detention facility or jail. Nevertheless, a citation is a form of arrest (Berger, 1972; Feeney, 1972;
Horney, 1980). Citation issuance establishes the recipient as a suspect in a criminal matter and
like a full-custody arrest it involves charging someone with a crime. If the citizen is found
guilty, the individual may be subjected to more law in the form of a fine and/or incarceration

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3 Since as early as 1903, statutes involving forms of field release have existed that facilitate the goal of a physical
arrest. The goal of a citation release is the official acknowledgement of a criminal act through a procedure that
enhances the likelihood that the individual will appear before a court of law without actuating a full-custody
arrest (i.e., taking the person to jail). While there are forms of stationhouse or jail release via citation, these
occur after the citizen has been taken into full custody and is subsequently released with a citation.
Regardless of the fact that the individual is not immediately taken off to jail or court, the issuance of a citation is the initiation of potentially serious legal proceedings (Berger, 1972).

How citations are measured is where Klinger’s FAS potentially suffers from a “point failure.” Klinger acknowledges that field citation releases are not equal to a full-custody arrest because the recipient is not deprived of his liberty to the same degree as when a full-custody arrest occurs (Klinger, 1996a). However, Klinger assigned both full-custody arrests and field releases a base score of five, the highest degree of formal authority in his scale. He also suggests that the issuance of tickets during traffic stops should be categorized in the same way (Klinger, 1996a: see footnote 7). For purposes of the proposed research, the issue becomes whether to include citations in the proposed FAS, and whether they should be ranked as equal-to or less-than a full-custody arrest.

In their present form citations have become a formal method of on-the-spot justice by police officers with formal legal consequences (Wilson, 1968). If citizens do not feel the ticket they received is just they can take the matter to court, which would bring the citizen before other social control agents (i.e., courts and judges) and possibly further into the criminal justice system. Otherwise, the fine associated with the ticket is presumably paid and the life of the citizen goes on with little interruption. Noncompliance with the citation (i.e., failure to appear and/or failure to pay the fine) eventually results in a warrant for arrest and further involvement with the system. Taking all of this into account, the issuance of a citation is a formal action that represents a high degree of formal authority, yet it is not as intrusive as a full-custody arrest. If for no other reason, receiving a citation is not equal in severity to a full-custody arrest because citizens are not subjected to an equivalent loss of liberty when they only receive a citation.
Therefore, when a citation is issued the police action will be categorized as a 7 on the proposed FAS.

**Official Report**

Like an arrest or a citation, an official report filed by the police creates a formal record of a citizen’s behavior (Black, 1970). While the filing of an official report does not involve the type of deprivation of liberty associated with a full-custody arrest or a field release via a citation, it is a formal police action with potential consequences. Official reports increase the likelihood that other legal agents or other forms of social control will be mobilized to address a citizen’s behavior beyond what was done during the encounter. Such reports can mobilize criminal investigations by other law enforcement officers or units, or they can mobilize other governmental services to intervene in the citizen’s life (Black, 1976; Black, 1980). When the police file or promise to file an official report regarding a citizen, the police action will be categorized as a 6 on the proposed FAS.

**Physical Search**

Whether it is a frisk during a stop or a search incident to a full-custody arrest, physical searches of citizens and the property within their immediate control (such as a vehicle) have not been incorporated into previous formal authority schemes, including Klinger’s FAS. It is not known why this particular police action has gone unmeasured in previous attempts to quantify law more precisely. It is likely that data on this type of activity were unavailable, and/or it has been considered part and parcel to a suspicion stop or an arrest and unworthy of study. Compared to general questioning, physical searches are a more intrusive form of information gathering. They reflect the exercise of more formal authority than a verbal interrogation (Black, 1976).
Searches are typically conducted to ensure officer safety and to obtain evidence to be used against a citizen in court or with other social control institutions. Information or evidence found during a search can influence the degree of formal authority exercised during the encounter itself, like whether a citizen is arrested or released with no other formal action taken. It is the intrusiveness and potential consequences of any contraband found as a result of a physical search that makes this particular police action an important measure of formal authority. Physical searches by the police will be categorized as a 5 on the proposed FAS.

**Prior Record (Criminal History) Checks**

Police checks for prior criminal records during an encounter are another police action that has not been used in previous outcome measures. Like a physical search, a check for a prior record represents a degree of investigation that is more intrusive than verbal questioning alone. Checking citizens for prior involvement with the criminal justice system is a more formal form of investigation than the initial information gathering officers typically engage in when they encounter citizens (Black, 1980; Sykes and Brent, 1980). To verify whether a person is already under governmental social control police officers often rely on official records that are available to them in the field via computers, commonly known as “mobile data terminals,” or through their radios (Pilant, 1999; Bureau of Justice Statistics, 2001). Accuracy in this form of field investigation involves soliciting verbal and/or physical documentation (e.g., a driver’s license,

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4 While it is reasonable to assume that searches are always conducted when full-custody arrests are made, this was not the case in all of the observed encounters where an arrest was made. In fact, searches were not conducted in 36 percent of the arrests made. In other words, 36 percent of those who were arrested were not searched prior to being escorted to a detention center for further processing. It should be noted that observers were not allowed to accompany officers and citizens into the detention center where arrestees were processed. It is possible that searches incidental to arrest were conducted during this unobserved period.
identification card, license plate or vehicle registration, etc.) from the citizen and detaining them, albeit briefly, while the information is verified against official records.

Although it is less intrusive than a physical search, checking a citizen for a prior record or for warrants in this way is still a means of formal search and seizure. When it is found that a citizen suspected of wrongdoing has a prior criminal record, officers are more likely to exercise formal degrees of social control, like filing a report, issuing a citation or arresting the suspect (Black, 1976; Myers, 1980; Avakame, et al., 1999). Based on the intrusive and formal nature of this form of information gathering, in addition to the potential consequences of these actions for the citizen, checks for prior involvement with the criminal justice system will be categorized as a 4 on the proposed FAS.

**Imposed or Threatened Solutions or Actions**

When the police impose or threaten courses of action against citizens, their actions represent the inherent formal authority officers possess (Skolnick, 1966; Mastrofski, et al., 1996). In the course of everyday police work, officers frequently use informal actions known as “order maintenance activities” to address citizen behavior and return situations to a state of normality (Wilson, 1968). These actions are considered to be informal because they are not always clearly rooted in codified law and may not invoke the criminal justice process. Furthermore, order maintenance activities often times go undocumented, so the behavior of those involved in the encounter is not exposed to other legal agents (Goldstein, 1960; Wilson, 1968).

Nevertheless, when officers threaten or impose a solution upon a citizen, they are using their formal authority “to resolve matters in an ‘informal’ fashion” (Klinger, 1996a: 399). Although it is not a formal action, the officer is intruding into a citizen’s life. Logically, no informal action should represent more formal authority than any formal action. Therefore, when
a citizen experiences an imposed or threatened solution or action by the police, this type of informal action will be categorized as a 3 on the proposed FAS.

**Discussed Situations/Suggested Actions**

When police officers interact with citizens, they automatically exercise their formal authority through their mere presence (Black, 1976; Worden, 1989; Klinger, 1996a). Suggestions involve a degree of authority that is less coercive and less intrusive than a command or threat. Implicitly, the consequences of not adhering to a suggestion from the police are less than the consequences of not adhering to a threat. Nevertheless, an officer suggesting a course of action to a citizen reflects more social control than “nothing” (Klinger, 1996a; Mastrofski, et al., 1996). Consequently, when an officer discusses a situation or suggests a course of action with a citizen, the matter will be categorized as a 2 on the proposed FAS.

**Gathering Limited Information**

If it is accepted that by their mere presence police officers exercise a degree of their formal authority, then regardless of their brevity or how benign they may seem all police-citizen encounters involve some degree of social control (Black, 1976; Worden, 1989; Klinger, 1996a). Police officers often begin encounters with citizens by first asking them questions, which facilitates the regulation of the interaction (Sykes and Brent, 1980). The encounter itself is the result of the officer choosing to investigate and address the citizen’s behavior. This usually requires that an officer gather a minimal amount of information from the citizen like the citizen’s name and an explanation from the citizen regarding the behavior that brought them to the attention of the police. An officer may consciously decide to take no further action against the citizen, or it may instigate need for further actions by the officer (Brown, 1981; Klinger, 1996a). At this point, the officer’s exercise of formal authority is informal, minimally intrusive, and so
long as they comply with the officer’s request for information the outcome for the citizen is generally not serious. This type of action will be categorized as a 1 on the proposed FAS.

**Unit of Analysis**

Given the nature of the data available from the Metro-Dade (FL) study, it is understandable that Klinger focused on quantifying formal authority at the encounter level. Klinger chose encounters where police dealt with at least two people on opposite sides of a dispute as the unit of analysis (1996a). The focus of the proposed study will be on quantifying the amount of formal authority police use against individual suspects. The nature of the data available for the proposed research does not require aggregation to the encounter level. Detailed information on police encounters with lone citizens and multiple citizens suspected of wrongdoing was collected as part of the Cincinnati Observation Study. The unit of analysis is individual suspects.

The focus on quantifying formal authority applied against individuals is important because officers can utilize different amounts of formal authority against each member of an encounter to address a “problem.” When multiple citizens are involved in an encounter, the police are placed even more so than normal in the role of “problem-solver,” and decisions ranging from doing “nothing” to doing “something” to resolve the situation are made by police officers. A fundamental aspect of addressing any suspected wrongdoing on the part of citizens is the potential restriction, even if it were only temporary, of a citizen’s liberty by stopping them, investigating their behavior, searching them, and sanctioning them through a citation or a full-custody arrest. Whether the multiple citizens involved in the encounter are disputants or if they are collaborators in some type of wrongdoing, officers can formally process (e.g., arrest, ticket, etc.) one or all citizens. The police can formally process some citizens and informally process
others (e.g., verbally warn, suggest actions, etc.). Furthermore, they can choose to take no formal action against any participants involved in the encounter. Officers may regard different dispositions for each citizen as appropriate given the situational exigencies of the encounter (Klockars and Mastrofski, 1991; see also Bittner, 1970; Bittner, 1974; Brown, 1981). In encounters involving multiple citizens, officers may view some citizens as more culpable or “blameworthy” than others in the encounters, and based on these judgments they may use different sanctions against each encounter participant (Wilson, 1968; Black, 1976). Therefore, an individual level analysis would be more appropriate for the reasons mentioned.

**Operationalization of Klinger’s Formal Authority Scale (FAS)**

It is important to note at this point how Klinger operationalized the scoring of his formal authority scale. Klinger treated each category of his FAS as a “base score” where police actions were coded at the highest level of formal authority executed at the close of the encounter (Bayley, 1986; Klinger, 1996a). Klinger’s formal authority scale does not measure multiple police actions taken against citizens. In general, it does not use an additive scoring approach. If an officer suggests a course of action to one or multiple citizens in the encounter (a police action corresponding with a base score of 2 in Klinger’s FAS) and makes an official report related to the dispute (a police action corresponding with a base score of 4), the formal authority score for the encounter would be 4, not 6 (see Table 2.3). Exceptions to this operationalization occur when a citation release or an arrest happens.

Contingent upon three factors, Klinger assigned additional points to the base score of five when a field release or arrest occurred: how many citizens were cited or arrested in the encounter, how many charges were leveled against encounter participants, and whether the charge(s) involved a misdemeanor or a felony. At the close of an encounter where an arrest or
citation release occurs, the base value of 5 would be assigned. A full point would be added to this base score for each additional citizen arrested or released with a citation, not another five points. Additionally, one point would be added to the FAS score for each felony charge assessed to each arrestee, and 0.5 points would be added for each misdemeanor assessed to each arrestee. According to this operationalization, “an encounter where officers arrest two citizens who are released without booking would be scored as a 6; a case where a single citizen was booked on three felony charges would be scored as an 8, and so on” (Klinger, 1996a: 399). The ordinal dependent variable, the formal authority scale, thus becomes a metric variable where encounters receive a FAS score ranging from one to a hypothetical infinity (Klinger, 1996a).

**The Formal Authority Scale (FAS)**

The outcome measure used in this dissertation, the formal authority scale (FAS) diverges from Klinger’s approach with regard to the scoring of distinct police actions against citizens. The outcome measure will be a count of the number of formal authority scale actions used in the police-citizen encounter: the FAS score is a count of the number of formal authority scale actions used against a citizen. FAS scores will range from zero to eight. For example, if in the course of an encounter a citizen is arrested (an action that ranks 8th on the FAS) and the same citizen received a citation (an action that ranks 7th on the FAS), the FAS score for that citizen would be a 2. Operationalizing formal authority in this way takes us beyond identification of the most severe outcome in a police-citizen encounter. Counting only the highest degree of formal authority that an officer exercises against a citizen diminishes the fact that officers often use multiple actions (degrees of formal authority) to address citizen behavior. Utilizing an additive approach through counting the number of FAS actions taken allows us to look at how formal
authority is exercised in its totality and the quantity of formal authority in each police-citizen interaction.

Although the development of the formal authority scale has important implications for enhancing existing theories on police behavior, understanding what influences an officer to take a single action or multiple actions on this continuum is equally if not more important. In other words, understanding the different types of actions officers have at their disposal to address citizen behavior is important, but it is also important to understand under what circumstances officers use certain options or degrees of formal authority. The following is a review of the extant research on the correlates of officer behavior in police-citizen encounters.

**EXTANT RESEARCH ON CORRELATES OF OFFICER BEHAVIOR IN POLICE-CITIZEN ENCOUNTERS**

There is a large body of empirical research on officer behavior in police-citizen contacts. Researchers have examined both macro- and micro-level characteristics of police-citizen encounters to develop a comprehensive understanding of officer behavior. There have been three substantial literature reviews of the findings from research into officer behavior (Sherman, 1980; Riksheim and Chermak, 1993; Brooks, 1999). Officer behavior and its correlates have been analyzed at the individual level (officer characteristics), situational level (the context of the encounter and extralegal characteristics), and at the community level (variances in the structural conditions of the neighborhood or places where the encounter occurs) (Sherman, 1980; Riksheim and Chermak, 1993; Brooks, 1999). To develop a body of explanatory variables that help explain officer use of more or less law, the following section reviews the correlates of officer
behavior in encounters by the aforementioned levels of analysis.\(^5\) This research focused on nonarrest/arrest outcomes primarily. The intent here is to expand on the research in this area to see if the variables that appear to influence arrest influence other levels of law and if they influence other levels of law in the same way. Since this research looks at outcomes other than arrest, the influence of variables used in the existing literature is uncertain. Nevertheless, existing literature can be used to suggest how previously explored variables might influence formal authority that is less than arrest.

**Individual Officer Level Correlates**

Individual officer level correlates focus on the relationships between officer characteristics like gender, race, education, and length of service and officer behavior (Riksheim and Chermak, 1993). These factors have long been hypothesized to influence officer behavior with regard to how officers exercise discretion and coercive control, especially in the way officers’ practice order maintenance or use their arrest powers. The extant body of research indicates, however, that variance between officers by gender, race, education, and length of service offers little insight in predicting police officer use of coercive authority (Sherman, 1980; Worden, 1989; Riksheim and Chermak, 1993; Brooks, 1999).

**Officer Gender**

Although women are underrepresented in policing, the number of female patrol officers has been increasing steadily since the 1970s (Balkin, 1988; Martin, 1989). Available data from

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\(^5\) Officer behavior and its correlates has also been analyzed at the organizational level (police organization and political environment), however, organizational level correlates are not relevant to the present study because data used in this research were collected at a single police department. In other words, there is no variance in officer behavior to be explained at the organizational level. It is assumed that there is no variation in organization across police districts or patrol shifts. It should be noted that Klinger’s formal authority scale was
police departments in large cities, departments serving populations over 250,000 residents, indicates that the percentage of female full-time sworn personnel rose from 12.1 percent in 1990 to 16.3 percent in 2000 (Hickman and Reaves, 2003). The data to be used in the proposed research was collected in a city where the number of female officers rose from 10.1 percent in 1990 to 19.6 percent in 2000 (Hickman and Reaves, 2003). Research that compared female to male officers has typically found little difference in their behavior with citizens (Balkin, 1988; Riksheim and Chermak, 1993). The overall conclusion from research in this area may be changing, however, as the number of women in policing increases.

Some research suggests that female officers have an operational style that is less coercive than their male counterparts do. Research has shown that female officers initiate fewer encounters with citizens and when they do encounter citizens they make fewer arrests (Sherman, 1975; Balkin, 1988). It is presumed that these findings reflect an ability on the part of women officers to diffuse situations so that they do not end in an arrest. Female officers have been found to be involved less in incidents requiring physical force or involving excessive force (Lonsway, 2000). It has also been suggested that in their dealings with citizens, female officers are more willing to negotiate disputes, that they are more capable than male officers at mediating situations, thus there is a decreased likelihood of the more formal degrees of social control, like a citation or an arrest, occurring (Langworthy and Travis, 2003). 6 Women officers may use other options that have not been a part of prior endogenous measures. In short, findings that focus on arrests, or other police actions like mediation and separation, may not provide complete

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6 It should be noted that some research has found that when paired together, male officers sign arrest charges more often than females, which may influence the perception that females make fewer arrests (Balkin, 1988).
information concerning the differences that exist between male and female officers in how they exercise their formal authority. An examination of officer gender in the context of the proposed research may find that female officers are less likely to use formal actions involving arrest or citations against citizens and more likely to use informal degrees of formal authority, such as suggesting or imposing solutions. This correlate should be explored within the context of the proposed research.

**Officer Race**

Research on the influence of officer race has been conducted largely on differences between black and white officers, to the exclusion of other racial and ethnic groups. Over the last 30 years, policing has sought and experienced increases in racial diversity. For example, in the jurisdiction where the data for the proposed research were collected, the number of black officers rose from 16.5 percent in 1990 to 28.7 percent in 2000 (Hickman and Reaves, 2003: 11). There has been a longstanding belief that an officer’s race is positively related to their ability to control citizen behavior (Alex, 1969; Weitzer, 2000). More specifically, the social logic has been that in encounters where the officer and citizen are of the same race, the officer would be better able to manage the behavior of a citizen. Hence, black officers would likely use lower degrees of formal authority against black citizens, and they would be less likely to use arrest against black citizens.7

It has also been suggested that officers are predisposed to act on cultural expectations related to race and ethnicity (Black, 1976; Mastrofski, et al., 2000). When an officer and citizen

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7 It has also been shown that officer race results in no preferential or deferential treatment, and in some instances the opposite occurs. Some research has found that black officers may behave more coercively in black communities (Banton, 1964; Leinen, 1984).
are of the same race or ethnicity, officers are more likely to be lenient and less likely to exercise formal authority to its fullest degree, and *vice versa*. For example, African American police officers are more likely to be lenient with African American suspects and harsher with non-black suspects (Black, 1976; Mastrofski, et al., 2000). Black officers may more likely suggest or impose courses of action to address the behavior of black citizens rather than issue a citation or make an arrest.

While the research on the effects of officer race is mixed, there is a general interpretation that black officers are more coercive than their white counterparts are (Riksheim and Chermak, 1993). It is believed that black officers are more likely to arrest citizens, particularly black citizens (Alex, 1969; Friedrich, 1977), and that black officers are more likely to be in use of force and use of deadly force incidents (Fyfe, 1978; Riksheim and Chermak, 1993). However, when individual, situational and organizational characteristics are controlled, officer race has no effect on arrest outcomes (Smith and Klein, 1983; Worden, 1989). In short, research findings do not consistently support the belief that officer race is related to officer behavior in encounters with citizens.

It is unclear whether officer race may influence how officers exercise their formal authority. The perception that black officers are more coercive is shaped by empirical research that focuses on the most formal, coercive aspects of policing: arrest, use of physical force, and use of deadly force. Beyond findings using outcome measures that focus on the highest degrees of formal authority is the fact that most prior studies have used outdated data in order to draw

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8 A common interpretation of this finding is that because black officers were primarily assigned to black communities with higher rates of crime, black officers were (are) more involved in situations that necessitate higher degrees of coercive control like arrest or use of force (Alex, 1969; Geller and Karales, 1981; Leinen, 1984).
their null conclusions. Changes in policing and the status of blacks may result in an operational style unique to black officers. In short, there may be more observed differences in the exercise of formal authority between black and white officers than previously discovered.

**Officer Education**

The idea that a formal education is related to officer behavior can be traced back to August Vollmer’s efforts to recruit college-educated officers and efforts to reform policing into a more professional and efficient trade (Goldstein, 1977; Fogelson, 1977). Officers with higher levels of education are supposed to be better wardens of their discretionary powers and more effective in controlling citizen behavior. “Because college education is supposed to provide insights into human behavior and to foster a spirit of experimentation, college-educated officers are (hypothetically) less inclined to invoke the law to resolve problems, and correspondingly are inclined more strongly to develop extralegal solutions” (Worden, 1990: 576). If this is the case, when the situation permits, officers with higher levels of education would be more likely to use varying degrees of formal authority, up to and including arrest, to address citizen behavior.

The extant research has failed to confirm unambiguously that education influences officer behavior towards citizens, but there are some indications that officer education is related to officer behavior (Sherman, 1980; Worden, 1990; Riksheim and Chermak, 1993). Crank (1993) found officer education to be unrelated to officer exercise of legalism, as indicated through arrests or order maintenance actions. Smith and Klein (1983) found that officer decisions to arrest are not related to an officer’s level of education; however, police organizations with higher mean levels of educated officers had lower arrest rates. Some researchers have found that education is related to officer attitudes and officer behavior. Research using vignettes has found that college-educated officers are less likely to use formal dispositions to resolve encounters with
citizens (Finckenauer, 1976). Walsh (1986) found that when officer productivity is measured by the number of arrests made, the “high arrest producers” category also contained the highest percentage of degree holders, not those with just some college, in the study.

The level of education among the rank-and-file of police agencies is steadily increasing. The number of police departments requiring a four-year degree is on the rise, and the number of police agencies that require some type of college education has almost double from 1990 (19.3 %) to 2000 (37.1%) (Hickman and Reaves, 2003). As college-educated officers are becoming more commonplace, the influence of officer education remains an empirical question and still warrants exploration.

**Officer Length of Service**

While the research on the relationship between length of service and officer behavior towards citizens is mixed, length of service (or lack thereof) does appear to influence how officers exercise their formal authority. Compared to less experienced officers, officers with more years of experience have been found to make fewer arrests than their less experienced counterparts do (Forst, et al., 1977). Worden (1989) found that officers with less experience were overall more proactive than more experienced officers. Increases in officer experience may result in a familiarity with addressing certain situations (e.g., specific citizens and/or places). Thus, these officers may use alternatives to arrests. Experienced officers may have more opportunities to learn how to speak and act towards citizens in order to address citizen

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9 It has been suggested that officers become more cynical about police work over time, which results in decreased levels of activity, including order maintenance activities and arrest (Niederhoffer, 1967). According to Niederhoffer (1967), officer cynicism is lowest at the beginning of their career. Cynicism continues to increase during the next seven to ten years, after which officer levels of cynicism level out and actually decline slightly at the end of the officer’s tenure. This implies an inverse relationship between length of service and the degrees of formal authority officers utilize (as indicated by order maintenance and arrest activities).
behavior without actually taking formal actions (i.e., filing official reports, issuing citations, making arrests) (Mastrofski, et al., 1996).

Our picture of officer assertiveness or proactivity may be clouded by the reliance on arrests as a measure of how they exercise formal authority. Increases in officer length of service may only affect the degree of formal authority used, such as arrest, citation issuance or filing official reports, and not whether an officer uses less formal actions. Officers with more years of service may more likely use lower degrees of formal authority, such as threatening or discussing solutions.

**Officer Assignment**

What an officer is assigned to do, and how they view themselves within their assigned role, can also influence officer behavior towards citizens. Specifically, the exercise of coercive control may be influenced by whether an officer is assigned to community policing activities. The data to be used for the proposed research was collected as part of a larger study on the behavior of traditional (“beat”) officers and community-oriented police officers. Community policing (COP) encourages all line officers to be proactive and exercise a wider degree of discretion in their dealings with citizens, and proactive, discretionary behavior is supposed to be utilized even more so by officers assigned to community policing activities (Bayley, 1988). Community policing rejects law enforcement as the core function of the police and the arrest option is openly considered just one of several important tools available to officers in the field (Mastrofski, et al., 1995). It has also been suggested that under COP an officer’s actions may be influenced more by the extralegal factors of a situation than the legal factors (Mastrofski, et al., 1995).
Officer assignment to community policing, and an officer’s orientation to community policing, appear to be a correlate of officer behavior. Research, however, is mixed regarding how officer assignment to community policing (or officers with attitudes supportive of COP) influences how much formal authority an officer exercises against citizens (Mastrofski, et al., 1995; Novak, et al., 2002). In short, situational level correlates of police-citizen encounters such as offense severity, quantity of evidence, citizen age, citizen demeanor, and whether a citizen is intoxicated appear to interact with officer assignment to COP and officer orientation towards COP. The influence of officer assignment and orientation to community policing is highlighted in more detail throughout the following section on situational level correlates.

**Situational Level Correlates**

The extant research has found that situational level correlates of police-citizen encounters and various extralegal characteristics have the greatest impact on officer behavior (Sherman, 1980; Riksheim and Chermak, 1993; Brooks, 1999). To address citizen behavior and establish the appropriate degree of social control, officers must often base their actions in accordance with situational exigencies of the encounter (Bittner, 1970; Brown, 1981). Situational correlates can be grouped into three broad categories: legal variables (such as citizen conduct in clearly violation of the rule of law), extralegal variables (such as citizen characteristics and certain citizen behaviors), and the physical setting of the encounter.

**Legal Variables**

Legal variables are factors that influence officer behavior based on the rule of law. Examples of legal factors include the type of offense or activity that is performed by the citizen and/or any physical evidence or testimony that this activity occurred. Legal variables should
influence officer decision making. The police have a mandate to uniformly enforce codified law (Goldstein, 1963; Burton, et al., 1993). Citizens who are clearly in violation of the law are more likely to be formally processed by the police, even more so when evidence exists to substantiate a citizen’s guilt.

**Offense Severity**

The legal severity of a citizen’s behavior is perhaps the most consistent predictor of officer behavior, particularly when it comes to arrest outcomes. Extant research indicates almost without exception that as offense severity increases so too does the likelihood of a penal, law enforcement response from officers. This is consistent when offense severity has been measured by the standard of felony/misdemeanor or a crime scale (Black and Reiss, 1970; Black, 1971; Lundman, 1974; Friedrich, 1977; Moyer, 1981; Smith and Visher, 1981; Smith and Klein, 1983; Smith, 1984; Smith, Visher and Davidson, 1984; Sykes, Fox and Clark, 1985; Worden, 1989; Lundman, 1994; Lundman, 1996a; Lundman, 1996b). Offense seriousness is a significant correlate in traffic offenses (Lundman, 1979, Lundman, 1998) and encounters involving juveniles (Piliavin and Briar, 1964; Lundman, Sykes and Clark, 1978). It is also a consistent correlate in situations involving interpersonal or domestic violence (Berk and Loseke, 1980-81; Smith and Klein, 1984; Worden and Pollitz, 1984; Smith, 1987; Feder, 1996; Feder, 1998; Jones and Belknap, 1999).

Some notable exceptions to the relevance of offense seriousness do exist. Visher (1983) found that officers might act more chivalrously toward female offenders, as officers were more likely to arrest women for property offenses than violent offenses. Mastrofski et al.’s (1995) research comparing arrest dispositions among officers with positive and negative attitudes toward community policing is another rare exception. In their sample of officers with positive
attitudes, offense seriousness was not significantly related to arrest. However, among officers with negative attitudes toward community policing, offense seriousness was positively correlated with arrest outcomes. Interestingly, other research conducted in the context of community policing has found offense seriousness to be insignificant in predicting officer behavior. Novak, et al., (2002) found that while their dichotomous offense seriousness measure (comparing minor offenses and misdemeanors to serious offenses and felonies) was not a significant predictor of arrest behavior for either traditional patrol officers or officers assigned to community policing activities, other legal factors like the amount of evidence implicating a citizen in some type of wrongdoing may be more important. With regard to the proposed study, offense seriousness may be an important predictor of police actions less than arrest for officers assigned to community policing.

Evidence

Legally, police officers need to meet certain evidentiary standards before they can exercise their formal authority, such as reasonable suspicion to stop and frisk and probable cause to arrest. These standards are based on the evidence available to an officer. Greater levels of evidence (such as observation of a criminal offense, physical evidence or testimonial evidence) increases the likelihood that a citizen’s behavior warrants and will receive official sanctioning. Indeed, research confirms that as the presence of evidence increases so too does likelihood of arrest (Black and Reiss, 1970; Black 1971; Friedrich 1977; Klinger, 1994). Research by Mastrofski, et al., (1995) and by Novak, et al., (2002) that examines coercive control within the context of community policing indicates that as the quantity of evidence available to an officer
during an encounter increases so does the likelihood of arrest. It is likely that as the quantity of evidence increases officers are more likely to arrest, cite or file an official report.

**Extralegal Variables**

Extralegal factors are characteristics that refer to the citizen involved in the encounter and the citizen’s behavior. Theory and empirical research on police discretion suggest that decisions to take action in encounters with suspects, whether to use informal or formal actions, and the degree of the actions to be taken (i.e., verbal warnings versus written reports versus citations versus arrest) are not made solely on the basis of legal considerations (Davis, 1975; Lipsky, 1980; Hagan, 1989; Worden, 1989). Even though the law provides structure and legitimacy to many of the actions the police take in dealing with citizens, police officers still have a great deal of discretion with regards to how they enforce the law and maintain order (Bittner, 1970; Goldstein, 1977).

Extralegal variables are important to consider as correlates of police behavior towards citizens because officer behavior has never been perfectly predicted by legal factors alone (Sherman, 1980; Riksheim and Chermak, 1993). Therefore, extralegal variables need to be explored for their potential influence on officer behavior, above and beyond legal factors. The influence of extralegal factors is, however, unclear (Sherman, 1980; Riksheim and Chermak, 1993). Police officers have probably always taken into account the social dynamics of encounters with citizens. Selective, discretionary law enforcement is the norm in policing (Smith, 1981). Including citizen characteristics and behavior as predictors of encounter dispositions may be necessary to fully understand officer use of formal authority, up to and including arrest. Extralegal variables included in this study include citizen age, race, gender, social class, demeanor, and intoxication.
Citizen Age

A citizen’s age can have direct bearing on the legal options and system resources available to an officer for dealing with the citizen’s conduct. For instance, juveniles may hold a unique position in police-citizen encounters (Bazemore and Senjo, 1997). Because of their legal and social status, juvenile citizens are subject to a different set of laws and regulations. Juveniles can be restricted in their activities during certain times of day through truancy and curfew laws (Mazerolle, et al., 1999), and in environments where the police utilize a more legalistic style of policing, the behavior of juveniles is generally more scrutinized than the conduct of adults (Smith, 1984). Research is generally mixed with regard to the influence of citizen age on officer use of formal authority (Sherman, 1980; Riksheim and Chermak, 1993).

Citizen age may be relevant with regard to the type of officer involved in an encounter. Officers assigned to community policing activities may be more disposed to using informal sanctioning such as order maintenance when encountering juveniles rather than formal sanctioning, though research findings are mixed on this issue (Cordner, 1995; Bazemore and Senjo, 1997). Research suggests that officers who hold negative attitudes toward community policing appear more likely to arrest juvenile offenders than their pro-community policing counterparts (Mastrofski, et al., 1995). Furthermore, other research on arrest outcomes in a time of community policing suggests that being a juvenile does not afford a citizen any leniency from the more formal aspects of social control. Indeed, Novak, et al., (2002) found citizen age to be inversely related to arrest, as officers assigned to community policing activities were more likely to arrest juveniles than traditional beat officers. It remains an empirical question whether the police are more likely to use high degrees of formal authority against juveniles, such as arrest or citations, or lower degrees of formal authority like discussing or imposing solutions.
Citizen Race

While there are numerous officer-citizen race permutations that are possible in police-citizen encounters, how officers (white or black) treat black citizens has been a primary focus of empirical policing research (Sherman, 1980; Smith, et al., 1984; Riksheim and Chermak, 1993; Brooks, 1999). The belief that police interact differently with black citizens is not new (Alex, 1969; Bayley and Mendelsohn, 1969), and questions about the disadvantages and discrimination blacks experience remain a concern (Black, 1976; Smith et al., 1984; Wilbanks, 1987; Mann, 1987; Walker, Spohn and DeLeon, 1999). While citizen race is a widely-used control variable in policing research, the available research on the influence of citizen race is mixed.

Some of the extant research has found that black citizens experience more coercive social control. Blacks are more likely to be stopped, questioned and arrested (Lundman, 1979; Smith and Visher, 1981; Smith and Klein, 1984; Lundman, 1998; Novak, et al., 2002). Disparities in how officers exercise social control against blacks have also been found to be spurious once other situational correlates like legal factors and citizen demeanor are controlled. However, recent research that addresses many of the concerns about spuriousness and poor operationalization of demeanor has found that blacks are more likely to be arrested than their white counterparts do (Engel, et al., 2000). Citizen race may influence all forms of police authority, with blacks being more likely than whites to experience all eight degrees of formal authority on the proposed FAS (Black, 1976; Black, 1980).

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10 Pilaivan and Briar (1964) and Black (1971) note that the reason officer behavior appeared discriminatory was due to the fact blacks were more likely to be antagonistic toward police officers than whites. Others have found that blacks were more likely to be arrested because they were involved in more serious offenses (Pilaivan and Briar, 1964; Wilson, 1968; Black and Reiss, 1970). Furthermore, the disparity in arrests between whites and African-Americans has been a product of victim preferences (Lundman et al., 1978): victims of African-Americans typically prefer arrest to other types of police action, thus accounting for the high proportion of arrests.
Citizen Gender

Like citizen race, research on citizen gender tends to focus exclusively on one group: females. The influence of citizen gender, in particular being a woman, on officer behavior is thought to be conditioned by what kind of behavior brings a woman to the attention of the officer. When females act outside of their perceived gender role, when they commit crimes that are typically committed by men, they may be more likely to be formally sanctioned by the police because they are thought to be more deserving of arrest (Messerschmidt, 1993; Belknap, 1996). Otherwise, when police encounter a female citizen it is presumed that the officer will not use the more penal aspects of social control, like arrest. Visher (1983: 6) clarifies how this relationship between the police and female citizens generally works: “...if women fail to conform to traditional female roles, then the assumed bargain is broken and chivalrous treatment is not extended.”

Most of the extant research on how citizen gender influences officer use of penal styles of control suggests that citizen gender does not influence the likelihood of arrest (Moyer, 1981; Smith and Visher, 1981; Smith, 1984; Smith and Klein, 1984; Bayley, 1986; Worden, 1990; Mastrofski et al., 1995; Feder, 1996; Lundman, 1998). There are, however, some exceptions. Visher (1983) found officers were more likely to arrest females for property offenses and not violent offenses, a finding that questions the hypothesis that more formal social control against women is limited to incidents where women commit nontraditional female crimes. In encounters where no complainant is present, females appear less likely to be arrested than males, and this was particularly true for white females (Smith, et al., 1984). Similarly, Smith (1986) reported that females were somewhat less likely to be arrested. It may be the case that while women are
no more or less likely to be arrested female citizens experience other degrees of law, such as imposing or suggesting solutions, that are more than nothing but less than arrest.

**Citizen Demeanor**

Although high degrees of formal authority like arrest or citations are seldom used by the police, when formal sanctions are used they are often reserved for individuals who “flunk the attitude test” (Friedrich 1977; VanMaanen, 1978; Lundman, 1998). If existing research on arrest outcomes is any indication of how officers use formal authority against disrespectful citizens, bad demeanor is likely to result in the exercise of higher degrees of formal authority than lower degrees. Citizen demeanor speaks to how a citizen behaves in the face of officer authority. Most policing scholars agree that officers are more likely to apply the more penal, formal aspects of the law when a citizen exhibits a poor or hostile demeanor (Fyfe, 1996). Simply put, “Hostility toward the implementers of the law begets the sanctions of the law” (Friedrich, 1977: 372). The extant research on the relationship between demeanor and police behavior is quite rich. The overwhelming consensus from this large body of research is that the expression of a poor or hostile demeanor on the part of a citizen increases the likelihood of arrest (Sherman, 1980; Riksheim and Chermak, 1993; Fyfe, 1996; Brooks, 1999). However, the role of demeanor in police-citizen encounters has not gone unquestioned.

Klinger (1994; 1996a; 1996b) has suggested that because demeanor has been imprecisely operationalized and poorly controlled in much of the extant research, the relationship between demeanor and arrest may be invalid (Fyfe, 1996; Worden and Shepard, 1996; Engel, et al., 2000). In order to truly test the relationship, criminal activity must be properly controlled; demeanor must be measured before arrest occurs, and measures of citizen demeanor must be limited to behaviors and utterances that are legally permissible. Criminal behavior committed
during the encounter or “interaction phase” confounds the effects of the citizen’s illegal behavior and their actual demeanor toward the police (Klinger, 1994; Fyfe, 1996; Klinger, 1996b; Lundman, 1996b; Worden and Shepard, 1996; Engel, et al., 2000). Klinger found that when these issues were taken into account the likelihood of arrest did not increase for undeferential citizens (Klinger 1994; 1996b).

While Klinger’s critique on how demeanor has been operationalized and controlled has merit, his findings are still in the minority when considered against the extant research in this area. Researchers have since reanalyzed prior research on demeanor (Lundman 1994; Worden and Shepard 1996) and have conducted new research on the matter that addresses the issues raised by Klinger (Engel, et al., 2000). Mastrofski et al. (1995), found that both officers with positive and negative views toward community policing were more likely to arrest disrespectful citizens and Novak, et al. (2002), found both traditional beat officers and officers assigned to community policing activities were more likely to arrest disrespectful citizens. While the influence of demeanor may be weakened when Klinger’s critiques are addressed, the consensus is that the police are still more likely to take coercive action against an antagonistic or hostile citizen than a citizen who is deferential, even under the community policing paradigm (Mastrofski, et al., 1995; Worden, et al., 1996; Engel, et al., 2000; Novak, et al., 2002). It remains an empirical question whether demeanor influences other degrees of formal authority like the filing of an official report or officers’ making threats to address disrespectful citizens.

**Citizen Intoxication**

Citizen intoxication by alcohol or drugs can influence officer behavior during an encounter, particularly whether a formal sanction like an arrest is applied. Those who appear “out of sorts” in public places, citizens who appear unconventional by signs of homelessness,
intoxication, and/or mental illness are not well-integrated into social life. People who are integrated into social life generally experience police control more favorably than those who are at the margins of social life do: the unemployed, the homeless, drunkards, the mentally ill, strangers, and outsiders to a community or social setting (Black, 1976; Avakame, et al., 1999). Officers may perceive those individuals who are intoxicated as a threat to society, and therefore they are more deserving of formal social. This is particularly true for certain offenses, such as driving under the influence (DUI) where the degree of intoxication is more akin to a legal variable, namely offense seriousness (Bayley 1986; Black 1980; Lundman 1996b; Lundman, 1998). In non-traffic situations, however, officers may view actions along the lines of order maintenance as more appropriate for situations involving public intoxication (Bittner, 1967). Officers may be less likely to arrest a citizen who is guilty of being intoxicated in public and nothing else.

There is a growing body of empirical research on the impact of citizen intoxication, and recent studies suggest that citizen intoxication in public is related to how officers exercise coercive control.¹¹ Mastrofski, et al. (1995), found that intoxicated citizens are more likely to be arrested by officers with positive attitudes toward community policing. According to research by Novak, et al. (2002), officers assigned to community policing activities are much more likely than traditional beat officers to arrest intoxicated citizens; however, these intoxicated citizens were more likely to be arrested when encountered by either type of officer. The interaction

¹¹ Much of the non-traffic empirical research that examined the influence of citizen intoxication on officer behavior involves interpersonal disputes. This research suggests that intoxicated citizens are not more likely to be arrested than sober citizens. Most research on this issue examined domestic violence encounters (Berk and Loseke, 1980-81; Smith and Klein, 1984; Feder, 1996; Feder, 1998; Jones and Belknap, 1999). In his analysis of the impact of intoxication within all violent disputes, however, Smith (1987) reported that intoxication did not influence arrest, and citizens who were intoxicated were more likely to be separated by the police instead of arrested.
between bad demeanor and citizen intoxication also increases the likelihood of arrest. In other words, an intoxicated citizen who also shows disrespect to an officer is more likely to be arrested than a citizen who is intoxicated and deferential to the police (Engel, et al., 2002). Hypothetically, then, intoxicated citizens may more likely experience high degrees of formal authority, such as citations, official reports, physical searches, and background checks for prior criminal conduct.

**Citizen Residency**

Whether the citizen lives, works or resides in the area where the police encounter them can also influence officer behavior. Citizens who are property owners, local residents or workers in or near the area of an encounter with the police would be considered more integrated in social life. Integration in social life provides a degree of leniency or immunity from the more formal, penal aspects of the law (Black, 1976; Avakame, et al., 1999). The behavior of residents may be seen as more legitimate than that of strangers and residents may experience less or lower degrees of formal authority than nonresidents or strangers to the encounter location/area. Officers may be less likely to enact an arrest or other forms of formal authority on residents (Bayley, 1988).

**Citizen Bystanders**

In general, when the police encounter a citizen in a public place there are witnesses, at least passersby, to the encounter (Sykes, 1986). It is assumed that the police behave differently towards citizens when in highly visible places, such as public streets or areas, or when they are in front of other persons who are not directly related to the encounter. It is important for the police to establish to the citizens involved in the encounter, and anyone observing the encounter, that only the police are in control of the situation (Bittner, 1970; Rubenstein, 1973; Sykes and Brent, 1983). Black (1976) suggests that governmental social control is often necessary in public
places, particularly when other forms of social control are weak, and law is more likely to be exercised at higher degrees in public settings than in private settings. Establishment of control can occur by an officer making an arrest, but it can also be accomplished by the exercise of order maintenance (Muir, 1977). Research on the influence of bystanders on officer behavior is at best mixed.

Friedrich (1977) found a curvilinear relationship between the number of bystanders to an encounter and the likelihood of arrest, where the likelihood of arrest was highest when there were no bystanders present and when more than 10 people were present. Other research has found a simple, positive relationship between the presence of bystanders and formal sanctioning, where the likelihood of arrest increased as the number of witnesses to the encounter increased (Smith and Visher, 1981; Visher, 1983; Buzawa and Austin, 1993). Yet others have found an inverse relationship, where the likelihood of arrest increased with fewer bystanders present (Engel, 2000). Given these findings, it is important to examine whether the presence of bystanders affects the degree of formal authority officers use against the citizens they encounter, up to and including arrest. The presence of bystanders or the number of bystanders present may make officers less likely to use informal actions like general information gathering or discussing solutions.

**Supervisors or Other Officers Present**

When supervisors or other officers are present during an encounter, the officer who initiated the encounter is subject to a form of “peer review.” It has been suggested that the presence of supervisors influences officer actions that are concrete and measurable by supervisors, such as the issuance of citations or arrests (Wilson, 1968; VanMaanen, 1973). The empirical research on whether officer behavior towards citizens changes under such
circumstances is mixed, specifically on whether officers are more likely to take formal actions up to and including making an arrest to handle the situation.

Some research has found that when a supervisor does arrive on the scene of an encounter officers spend more time at encounter, which suggests that supervisor oversight has some effect (Allen, 1982). Friedrich (1977) reported an inverse relationship where the likelihood of arrest decreased as the number of officers at the scene increased. However, research by Smith (1984), Smith and Klein (1983), and Engel (2000) suggests that arrest is more likely in situations where a supervisor was present. Furthermore, the presence of multiple officers appears to increase the likelihood of arrest (Engel, 2000), and the odds of a citizen being arrested also increase when a citizen is verbally resistant or noncompliant in the presence of other officers (Engel, et al., 2000). It remains an empirical question whether the presence of supervisors or other officers influences nonarrest actions like the issuance of citations, filing of official reports, threatened solutions, etc.

**Community Level Correlates**

Police-citizen encounters occur within the context of places and the neighborhood context of where an encounter occurs may influence officer behavior towards citizens. Theoretically, there is a relationship between levels of neighborhood informal social control and the exercise of formal social control by police officers. In communities where informal social control is weak there is a greater need for formal social control, such as official police intervention (Bursik, 1986; Schuerman and Kobrin, 1986; Klinger, 1997). Disorganized

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12 Engel, et al., (2000) suggest that this finding be interpreted with caution, however, because the causal order of the relationship is unknown and could not be addressed within their data. According to Engel, et al., (249: 2000), “It may be that officers are more inclined to arrest if a suspect is noncompliant or verbally resistant when other officers are present, but it may also be that other officers are called to the scene to help with a noncompliant or verbally resistant suspect.”
communities and fragmented communities rely more heavily on governmental social control through police intervention (Duffee, 1990; Langworthy and Travis, 2003). Therefore, common characteristics of disorganized neighborhoods such as residential mobility, racial heterogeneity and poverty have hypothesized contextual effects on officer behavior. Further, neighborhood characteristics indicative of greater disorganization, greater threat of harm, or greater fear, in turn lead to more coercive police responses. The social distance between the police and the public in high crime, poverty-stricken areas causes officers to act differently to citizens encountered in such neighborhoods (Bayley and Mendelsohn, 1969). In these areas, officers are more prone to be assertive and use penal forms of social control.

**Crime Rate**

While the issue may seem tautological when talking about how officers exercise formal authority via arrests, particularly if crime rates are measured as number of arrests, the overall crime rate of a community may influence how officers use their formal authority against citizens. In communities with high crime rates officers may be more prone to using arrests to meet expectations that the police treat criminal behavior seriously in that area and to deter criminal activity (Sampson, 1986). Additionally, in high crime communities officers are more likely to encounter citizens (“symbolic assailants”) whom they believe need to be treated with the more formal degrees of social control (i.e., searches, background checks, official reports, citations, arrests) (Skolnick, 1966). On the other hand, citizen conduct may have to be very serious to elicit formal responses when it occurs in a high-crime area, yet the same may not be the case in places where the crime rate is low. According to Klinger (1997), citizen conduct in low crime areas does not necessarily have to be very seriousness to elicit an arrest, but conduct in high crime areas must be very serious to elicit an arrest response.
The empirical research is mixed in regards to the impact of community crime rates on behavior in police-citizen encounters. Smith (1986) found community victimization rates to be unrelated to officer decisions to arrest, use coercion, or file criminal reports. Similar results were found in examinations of arrest decisions in interpersonal disputes (Smith, 1987). Liska and Chamlin (1984) found, however, that cities with greater numbers of reported crimes had correspondingly higher arrest rates. The relationship between the crime rate and officer use of formal authority is unclear, particularly for nonarrest actions, and should be further explored in this research.

**Residential Stability**

Areas that experience higher proportions of residential instability, such as areas with a high proportion of renter occupied dwellings, are presumed to be areas that are disorganized and lack a high degree of informal social control. Also, the number of persons who have lived in a community for a short period of time is an indicator of mobile populations. There is a reduced chance for police officers and citizens to have direct knowledge of each other, and reduced opportunity to build co-productive relationships, in communities with mobile populations. When these factors combine, residential instability results in greater reliance on formal social control (Shaw and McKay, 1942; Sampson and Groves, 1989).

Smith (1986) found that officers were less prone to exercise their formal authority through order maintenance activities in communities with high proportions of persons residing in the area for less than 5 years. Due to the fact that indicators of stability can be measured in two different ways (proportion of rental units and proportion of persons residing in the community less than five years), and because these measures tap differing constructs, they should both be considered as indicators of dispositions in encounters between the police and the public. Police-
citizen encounters that occur in places where residential stability is low are presumably more likely to be dealt with through higher degrees of formal authority like the issuance of citations or arrests.

**Racial Composition**

According to racial conflict theory, racial minorities are seen as threats to the majority, as well as local agents of formal social control, and the racial composition of a neighborhood may affect officer behavior (Turk, 1969; Black, 1976). Communities with high proportions of minorities may elicit more aggressive police responses by officers, regardless of citizen race. In this regard, the percentage of non-whites in a community has a contextual effect on police practices where these communities are perceived to present a greater threat, requiring more use of formal authority. Accordingly, as the proportion of non-white population of a community increases, the likelihood of arrest or the use of order maintenance actions also increases.

The majority of the empirical literature supports this hypothesis. Research has found that in large cities with high proportions of non-white populations, arrest rates for property crime and personal arrests were high (Swanson, 1978; Liska and Chamlin, 1984). Crank (1990) found a positive relationship between percent African-American and arrests for high discretionary offenses such as trespass and disorderly conduct. Similar practices were reported for arrests for

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13 There are differing perspectives within the social threat literature on what makes racial minorities threatening. One perspective, the perspective used in this dissertation, advocates that the greater the presence of minority populations, the more likely the elites will feel threatened and use the police to control racial minorities—a linear relationship. Another perspective (“power threat hypothesis”) suggests that the relationship is nonlinear, that as the percent of nonwhites in a population approaches or surpasses 50 percent minority residents are no longer viewed as a threat to the status quo and are no longer viewed as minority group members (Blalock, 1967; Katz, et al., 2002).

14 When using the percent of nonwhites in the population to examine either the level of threatening minorities or the level of racial heterogeneity, caution should be exercised. Communities or areas that have large proportions of nonwhites may give the appearance of high levels of racial heterogeneity or a large racially threatening group when in reality nonwhites may represent the majority and the area being examined is very homogeneous.
proactive drug enforcement (Miller and Bryant, 1993). Research by Smith (1986) found that officers were more active in racially mixed neighborhoods, even when controlling for situational characteristics. The percent non-white in a neighborhood had no impact on arrest decisions; however, proportion of non-white residents did exhibit a positive relationship with the use of coercion and order maintenance (Smith, 1986). Hypothetically, then, officers may be more likely to threaten or impose solutions, conduct prior record checks, physical searches, issue citations, and make arrests in areas that have a high non-white population.

**Economic Distress**

Citizens encountered by police in communities with high economic distress, such as high proportions of persons living in poverty, may be more likely to receive penal forms of social control. From a conflict perspective, the conduct of persons encountered in poor areas may be viewed as a greater threat to those in power and thus the police may be more apt to choose more punitive dispositions (Chambliss, 1976; Quinney, 1980). Extant literature, utilizing differing measures of economic distress, supports the above contentions that people encountered in such areas are more likely to experience coercive control. The proportion of persons living in poverty is positively related to officer arrest decisions (Smith 1984; Smith and Klein, 1984; Smith et al., 1984). Using an ordinal scale of poverty, Smith (1987) found that officers were less likely to intervene in interpersonal disputes in poor areas, however when they did intervene, they were more likely to arrest one of the citizens involved in the encounter. Community characteristics remained significant even when controlling for situational influences, whereas “offenders encountered in lower-status neighborhoods have a higher categorical risk of being arrested independent of factors such as type of crime, race of offender, offender demeanor and victim preference for arrest” (Smith, 1986: 338). Miller and Bryant (1983) found a positive relationship
between the proportions of persons in poverty and the likelihood of proactive drug arrests. However, Crank (1990) found that percent unemployment (another indicator of economic adversity) was inversely related to arrest rates in urban areas. Hypothetically, then, officers may more likely threaten or impose solutions, conduct prior record checks, physical searches, issue citations, and make arrests in areas that have a high poverty rate.

**Household Structure**

In communities with lower levels of guardianship, such as neighborhoods with high proportions of single parent families, the odds of arrest may be disproportionately increased. Single-family households represent decreased levels of guardianship in a community, particularly over juveniles, and this factor has been found to be related to increased crime rates, lower levels of informal social control, and greater opportunity for offending and victimization (Smith, 1986). Additionally, Smith (1986) found that while proportion of homes with single parents was unrelated to officer use of arrest or coercion, officers were less likely to conduct criminal investigations. The relationship between the proportion of single family households where a police-citizen encounter occurs and officer use of formal authority is unclear, particularly for nonarrest actions. This relationship should be further explored in this research.

**CHAPTER SUMMARY**

This chapter has provided a summary of the extant research that has utilized ordinally ranked polytomous response variables to quantify law in police-citizen encounters. The rationale behind previous ordinal ranking schemes was presented, followed by a detailed discussion of the polytomous response variable to be used in the proposed research. The proposed formal authority scale (FAS) seeks to rank-order various distinct police actions as more or less law
according to the potential severity, intrusiveness and formality of the police action. This chapter concludes with a review of the relevant research on the correlates of officer behavior in police-citizen encounters. These correlates were reviewed at three different levels: individual level factors, situational level factors, and community level factors. The intent of these discussions is to present an overview of the extant research on police-citizen encounters as it may pertain to officer use of formal authority, up to and including arrest actions. Moreover, while there is a large body of research on these correlates and police behavior with citizens, these factors may exert different influences on an outcome measure that quantifies formal authority more precisely than no arrest/arrest outcome measures.
CHAPTER 3: METHODS

This chapter outlines the nature of the data to be utilized in this examination of officer behavior during encounters with citizens. This chapter has three purposes. First, this chapter presents the research questions that will guide this analysis of police-citizen encounters. Second, the data sources for the proposed research will be presented. A brief description of the police department under examination will be discussed, along with the types of data collected. The data to be used was obtained primarily through systematic social observations of police officers. Third, this chapter describes the variables used to measure the theoretical constructs of the proposed research.

RESEARCH QUESTIONS

Empirical research and commentary in the field of policing suggest that officers use their formal authority to varying degrees when dealing with citizens. As discussed in Chapters 1 and 2, police officers have and utilize several distinct tactics to address citizen behavior that are less than arrest. Contrary to the approach used in much of the research on officer dispositions against citizens, police officers are not limited to doing “nothing” or making an arrest (“something”) in order to deal with citizens. Unfortunately, there is little research on the nonarrest actions outlined in Chapters 1 and 2 and the correlates to those outcomes.

This dissertation explores the individual, situational and community level correlates of police use of formal authority during encounters with citizens. Police exercise of formal authority has typically been quantified by arrest outcomes and the correlates to such outcomes. Accordingly, this dissertation will attempt to answer the following research questions:

1. Do individual level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?
2. Do situational level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?

3. Do community level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?

In other words, this study will attempt to ascertain whether the correlates commonly used in research on arrest outcomes exhibit the same influence on formal authority when it is measured by the quantity of formal authority scale (FAS) actions taken against citizens. Having outlined the research questions that will guide this study, the data sources to be used in this research will next be discussed. A brief description of the research site will be presented, followed by a discussion of the three primary data sources (systematic social observations of police officers, local crime data for the research site, and census data for the research site).

DATA SOURCES

Organizational Arrangement of Study Site

Data for this study were collected from information gathered from the Cincinnati Police Division (CPD). The CPD is the largest police agency within Hamilton County Ohio, with 996 sworn officers in 1997 (Cincinnati Police Division Annual Report, 1997). A police chief who coordinated the activities of four separate bureaus headed the Division: the Patrol Bureau, the Resource Bureau, the Support Bureau and the Investigation Bureau. The Patrol Bureau performed all primary police functions, and within the Patrol Bureau there were seven separate sections: Tactical Planning, Patrol Administration, Special Weapons and Tactics (SWAT), the Night Chief, Event Planning, the Community Policing Coordinator, and the Police Districts (Novak, 1999). All officers who participated in this study functioned within the Patrol Bureau at the time of observation.
The observed officers were assigned to either beat officer or community policing officer (COP) duties. Beat officers typically perform all duties associated with traditional line-level police officers, particularly responding to calls for service. Other prescribed duties included traffic enforcement and traffic accident investigations, criminal investigations and arrests of persons believed to be engaged in unlawful activity, complete crime reports, conduct security checks in places of business, and conduct inspections of public and licensed places within the area of responsibility and enforce laws, ordinances and regulations concerning its operation (Cincinnati Police Division Patrol Officer Position Classification, 1998).

Officers assigned as to community policing were assigned to a specific community or in some cases several communities in which to perform community policing functions. Beyond their assignment to the general duties common to all officers assigned to the Patrol Bureau, COP officers were responsible for becoming acquainted with citizens of their assigned neighborhood, identifying neighborhood problems, forging partnerships with citizens to develop solutions to neighborhood problems, networking with local service agencies to assist in problem solving, representing the Division at community meetings, preparing and sharing crime statistics with citizens of the neighborhood, conducting security surveys, and developing initiatives to improve the future of the youth of the neighborhood (Cincinnati Police Division Community Policing Officer Position Classification, 1998). Since the organizational approach to practicing community policing was that certain officers within the organization are assigned the task of spearheading community policing efforts, the Division was structured as community policing specialists (Mastrofski, et al., 1994; Police Executive Research Forum, 1996; McGarrell, et al., 1997; Maguire 1997).
The Division was decentralized in that officers were assigned to one of five different districts located throughout the city. In 1994, the CPD redefined all five police district boundaries, and beat boundaries within the five districts, to conform to existing natural neighborhood boundaries. All officer assignments conformed to neighborhood boundaries. Parameters for crime reporting areas also conformed to neighborhood boundaries. There are five police districts, twenty-two different police beats, and fifty-two different communities in the City of Cincinnati. Officers performed their above outlined duties within assigned beats or neighborhoods and reported directly to sergeants located in their respective district.

Beat officers typically worked one of four 8-hour shifts: 1st shift (beginning at 6:00 a.m. or 7:00 a.m.), 2nd shift (beginning at 3:00 p.m., 4:00 p.m., or 5:00 p.m.), 3rd shift (beginning at 10:00 p.m. or 11:00 p.m.) and power shift (beginning at 7:00 p.m. or 9:00 p.m.). Officers typically switched shifts on an annual basis. In contrast, COP officers worked flexible 8-hour schedules. COP officers worked varying days of the week and began tours of duty at varying times of the day. COP officers only worked Monday through Friday, and began their shift between 7:00 a.m. and 1:00 p.m.

**Observations**

Data for this study were initially collected as part of a larger project funded by the National Institute of Justice (Frank, 1996). The data to be used in the proposed research were collected from April 1997 to April 1998 as part of an observational study on the street-level police activities of traditional ("beat") and community-oriented police officers in the city of Cincinnati, Ohio. Specifically, data collected during observations of encounters involving police officers and citizens will be used.
This study follows a long tradition of field observation studies whose focus is to quantify police-citizen interactions. According to Reiss (1971), systematic social observations have four characteristics. First, they occur in a natural setting with the officers in their working environment during the course of their daily work. Second, notes are taken in a deliberate and methodological fashion. The process of data collection is systematic and can be done by many observers who code and report observed activities in a similar fashion. Third, rules for observations and coding information are created to allow for scientific inferences. Finally, the data collected by researchers is independent of that which is being observed (e.g., the police officer). In short, systematic social observations of police officers allow researchers to quantify activities that occur across numerous observation periods.

**Observation Selection Criteria**

Systematic social observations should be structured in accordance with the study’s purpose, the appropriate unit of analysis, identification of relevant independent and dependent variables, identification of the sampling frame, creating data collection instruments, and determining reliability and validity (Reiss, 1971). Decisions should also be made concerning the selection of whom to observe, where to observe them, when to conduct observations, and what should be observed and recorded (Mastrofski, et al., 1998). The following describes the observation methods and selection criteria

**Whom and Where to Observe**

While the primary purpose of the larger study was to document and compare the activities of community policing officers and beat officers in one city, the data available from the larger study captured a wide-range of police-citizen encounters and the multiple aspects of those encounters. The original purpose of the study does not limit the appropriateness of the data for
quantifying formal authority in police-citizen encounters. To the contrary, the nature of the
larger study results in detailed, contemporary data on police use of formal authority against
citizens, specifically in a police division employing community policing.

The larger project sought to observe officers in their natural environment. Extant
literature found that officer routines and behavior might vary by neighborhood characteristics
(Wilson, 1968; Smith, 1984; Smith et al. 1984; Slovak, 1986; Smith, 1986; Crank, 1990; Miller
and Bryant, 1996; Sanders, 1997). Therefore, in order to make comparisons of the behavior of
officers based on assignment and orientation, attempts were made to observe COP and beat
officers in similar environmental contexts. If the researchers observed a COP officer assigned to
neighborhood “X,” the researchers also observed a beat officer in neighborhood “X.” COP beat
officers’ work in the same beats and neighborhoods, so the research staff chose to observe COP
officers and their complimentary beat officer.

Each neighborhood typically had one COP officer and more than one beat officer
assigned to the neighborhood at any given time. Therefore, the number of individual COP
officers observed was fewer than the number of beat officers observed in the study. Specifically,
data were collected on 33 different individual COP officers and 161 different individual beat
officers. However, 206 observations were conducted with COP officers and 236 with beat
officers.

**When to Observe**

In order to make the desired comparisons of COP and beat officers, the researchers
attempted to observe these officers during similar times of the day, and similar days of the week
(Reiss, 1971). Beat officers worked 24 hours a day, 7 days a week, whereas COP officers
typically worked from 10:00 a.m. to 6:00 p.m. Some COP officers began their 8 hour shift as
early 7:00 a.m., while others as late as 1:00 p.m. This variance posed problems in determining the shifts on which to observe beat officers, as COP officers typically work during 1st and 2nd beat officer shifts. In order to have the most comparable observations beat officers were observed on both shifts. Using this same logic, the researchers decided not to observe beat officers working 3rd shift or power shifts, as COP officers in the study never worked during these times. COP officers typically worked 5-day schedules from Monday through Friday or Tuesday through Saturday. Therefore, observations of beat officers were only conducted on Monday through Saturday. In other words, no observations occurred on Sundays, during 3rd shift, or during power shifts. Finally, this study was conducted over a one-year period from April 1, 1997 through April 30, 1998.\textsuperscript{15}

**Sampling Technique**

The sampling frame used to select officers consisted of all 47 COP officers in the city at the beginning of the project. Four COP officers were excluded because they spent portions of their workday on bicycles and observations of these officers were not logistically feasible. The final sampling frame was 43 officers, of which a computer randomly selected 33 for inclusion in the study. Of these officers, 18 were assigned to more than one neighborhood, 8 officers shared a neighborhood with another COP officer, and 4 were assigned to only one neighborhood. Six of

\textsuperscript{15} It was the larger project’s intention to conduct observations from April 2, 1997 through March 30, 1998. However, only 6 observations were conducted in the month of December. On December 6, 1997, two Cincinnati Police officers were shot and killed while attempting to serve a warrant for domestic violence. In the weeks that followed there were numerous changes in the routines of officers. Specifically, all officers were assigned to 2 person units for 2 weeks following the incident and there were numerous ceremonies conducted in the city including police funerals and memorials. These ceremonies closely resembled the actions described by Crank (1998: Chapter 23). These nonroutine events coupled with the research teams’ desire not to disturb officers in their time of bereavement, and the fact that the holidays were approaching, created a need to suspend observations until January 2, 1998. In order to compensate for not conducting the scheduled observations in December observations were conducted on randomly selected days and times in April 1998.
the COP officers worked in pairs (2-person units). These 33 COP officers were responsible for 29 of Cincinnati’s 52 communities (55.8%).

Having selected COP officers for inclusion in the study, the next step was to select their comparable beat officers. In order to observe beat and COP officers under the same conditions, and to address the differences in work schedules between COP and beat officers, observations of beat officer were randomly selected by 8-hour shifts in each of the beats selected for inclusion in the study. This selection method allowed for a larger sample of individual beat officers during work periods comparable to those of COP officers. Unfortunately, increasing the sample size resulted in a decrease in the number of observation periods for each individual beat officer. Nonetheless, a larger sample of beat officers’ increases confidence in suggesting that observed behavior is representative of the activities of beat officers working in a given community.

Beat and COP officers were observed in similar geographic areas. Observations were conducted in 18 (81.2%) of the Division’s 22 different beats in the City of Cincinnati. Researchers attempted to observe ten tours of duty for COP officers and beat officers in each selected beat over a twelve-month period. Researchers attempted to observe each officer no more than one time per month. This guideline was not always followed due to unforeseen circumstances such as officer vacations, officers missing work due to personal reasons, and officers and observers who became ill. In all, 93.4 percent of the observations were completed on the assigned date.

The sampling frame constructed for the larger project consisted of valid days of the week (Monday through Saturday) and valid shifts for beat officers only. A computer then randomly selected one day per month in which observations were to be conducted for COP and beat officers in a complimentary beat. Observers volunteered or were then assigned by the research
team to each of these observation periods. The COP coordinator within the CPD Patrol Bureau was presented a list of observation dates, officer names or beat number, and starting time of the observations one month prior to the actual observation. Finally, observers contacted the individual officer 2 or 3 days prior to the scheduled date to confirm the observation.

**Data Collection Instruments for Systematic Social Observations of the Police**

The primary purpose of the larger study was to examine the workloads and routines of community police officers and beat officers in the City of Cincinnati. Structured coding instruments were created to capture the different dimensions of officer activities, actions and behaviors. Following the data collection methodologies of other observation projects (Mastrofski, et al. 1998), four different coding instruments were used to systematically structure observations and the collection of necessary information to explore the variance in the behavior of police officers: ride instruments, encounter instruments and citizen instruments. The following is a brief description of these instruments and the data collected by each instrument.

**Ride Instrument**

One ride instrument was completed for each observation period. On each ride form information was collected regarding the type of officer (beat or COP), personal characteristics of the observed officer (gender, age, race, educational attainment, rank, length of service, and marital status), and questions about weather and precipitation during the ride. Observers were also queried about the officer’s attitude about having an observer present during the ride as a check for reactivity (see Appendix I).
**Encounter Instrument**

Encounter instruments tapped information about any interaction the officer had with members of the public. Like Mastrofski, et al. (1998), encounters were operationalized as face-to-face verbal or physical communications with members of the public that involved three verbal exchanges of information by the officer and the citizen. An encounter form was completed for each police-citizen encounter during the observation. Each encounter was further classified as “brief,” “casual,” or “full.” Brief encounters were typically short in duration; however, they may not completely satisfy the rules of an encounter. For example, if an officer requests a citizen to do something, but there is not a “three exchange of information,” this encounter was classified as brief.16

Casual encounters include contacts with the public that may satisfy the three-exchange rule, however the exchanges did not involve any type of police business. An example of a casual encounter is when an officer talked to a friend about non-police business (e.g., sports, current events, other friends) and does not act on behalf of the police division.17 Full encounters were all other police-citizen interactions, and are the focus of the proposed research. Information from brief and casual encounters will not be used in the proposed research.

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16 Observers coded information on interactions between the police and the public when each party spoke on three separate occasions, or if the encounter lasted more than one minute. For example, if an interaction occurred where the officer spoke (first exchange), the citizen spoke, then the officer spoke (second exchange), followed the citizen, then followed again by the officer (third exchange) followed by the citizen, this interaction was coded by observers as an encounter.

17 The most important component of the “casual” encounter is the lack of identifiable police business, and this often requires additional probing by the observer. For example, during one observation an officer was observed speaking with school officials in his neighborhood during which time he discussed no identifiable police business. He advised the observer that he likes to have these conversations to make citizens aware of his presence in the area because the school officials have problems from time to time with rowdy students. In this example, the conversation is part of a larger, long-term problem solving effort by the officer. Subsequently, it was not coded as a “casual” encounter but instead as a “full” encounter.
In comparison to the data collection protocols for full encounters in the larger study, the collection protocols for encounters classified as being “brief” or “casual” resulted in the recording of limited information on police actions and citizen characteristics. The data collected from brief and casual police-citizen encounters do not contain relevant information on the dependent variable and many of the independent variables proposed for this analysis. Consequentially, encounters that were casual or brief will not be used in the proposed research.

Each encounter instrument included information on how many other officers, supervisors, non-police service providers and citizens are present during the encounter. It also documented the reason for the encounter and the characteristics of the problem(s) during the encounter (see Appendix II for a complete list of problems), such as what the nature of the problem was when it was dispatched (if applicable), upon officer arrival, and at the conclusion of the encounter. It also contained information regarding officer actions such as problem solving or filing an official report (see Appendix III).

**Citizen Instrument**

The third coding instrument used in the larger study was a citizen form. These forms were completed for each citizen with whom the observed officer had contact with during the ride-a-long. Since there may have been more than one citizen present at each encounter, there are more citizen forms than encounter forms. Whereas encounter forms are place-specific, citizen forms are person-specific. For example, if an officer interacts with two citizens during an encounter at one location, the observer completes one encounter form and two citizen forms. Citizen instruments contained information regarding actions taken by the officer and the citizen while in the presence of one another. First, citizen characteristics were coded, such as gender, race, approximate age, approximate social class, apparent mental state, and whether they were
under the influence of drugs or alcohol. Like encounters, citizen interactions were classified as “brief,” “casual” or “full” using the same coding rules as discussed previously.

Any requests made by citizens of officers were recorded, such as if the citizen requested the officer to arrest (or not arrest) another citizen, citizen requested information, citizen requests for physical assistance, and citizen requests for the officer to speak on their behalf to other government agencies or other citizens. In turn, officer responses to these requests were also coded. Additionally, the citizen instrument also recorded actions and requests made by the officer toward the citizen. Examples of officer actions included officer searching this citizen, officer arresting this citizen, officer issuance of a citation to this citizen, officer asking the citizen to discontinue disorderly or illegal conduct and officer advising the citizen to call (or not call) the police again if the problem persists.

Information was recorded on how the officer facilitated such activities. How an officer went about asking or telling a citizen to do something (e.g., an officer asking the citizen to discontinue disorderly or illegal conduct) was recorded as being either a suggested, requested, persuaded, negotiated, commanded or threatened action. For each of these officer actions the citizen’s response to this action was also coded. In short, the citizen form captured many of the dimensions of the interaction between the officer and the public (see Appendix IV).

The combination of data collected through the ride instruments, encounter instruments, and citizen instruments will provide data relevant adequately address the research questions.

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18 A final data collection instrument, namely the activity form, was used to collect information regarding officer behavior when a citizen was not present. By definition, data collected in activity forms do not involve an interaction between the police and the public. Such activities included routine patrol, en route to a location, roll call, auto maintenance, report writing, meeting with other officers, attempting to locate a person or place, and personal time. The proposed research examines how officers’ use their formal authority during encounters with citizens. Information collected in these activity forms is beyond the scope of this analysis. Therefore, data contained in the activity forms is not used in the proposed research.
These data allow one to systematically code and report the actions taken by police officers during their interactions with citizens and (except for ecological factors surrounding the encounter) what influences the exercise of formal authority in the observed police-citizen encounters. Census data and crime data within the study site were also collected to facilitate a fuller understanding of officer behavior.

**Census Data**

In order to identify structural differences in communities, data were collected from the 1990 U.S. Census. Data were collected at the block-group level. This was necessary because definitions of community boundaries were identified at this level of analysis. These community boundaries were obtained from the Cincinnati Police Division, which realigned assignments, beats and districts in order to conform to these parameters. Maps obtained from the CPD were compared with block group census maps in order to determine which block groups corresponded with communities in Cincinnati. Following a determination of which block groups were included in each community, the block group data were obtained and aggregated to the community level. The data for each of these variables were obtained from the 1990 Census (U.S. Department of Commerce, 1994).

The history, organization and composition of communities in Cincinnati are important to the proposed research. Communities in Cincinnati are recognized by the city as separate political entities, whereas each community has one council that exerts political and fiscal influence on the city government. The history of these communities dates back to the early

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19 Though observations were conducted in 1997 and 1998, Census data from 1990 were used to create the community level variables. Certainly, these data may be somewhat outdated. Though it would have been preferable to use estimations of population complexity, this was not possible. Census estimations are completed only for counties and large cities, and estimations are not available for tracts or blocks. Since variables were created using tract and block level data, estimations were inappropriate.
1900s when these communities were separate villages or cities not yet incorporated by the city (Thomas, 1986). In fact, prior research on social disorganization utilized Cincinnati communities due in part to their geographic and political characteristics (Shaw and McKay, 1942). These communities have particular relevance for the current examination due to the fact that the CPD assigned COP officers to particular communities in order work collectively with the community councils to identify problems and form solutions (Cincinnati Police Division Community Policing Officer Position Classification, 1998). As such, these communities do not merely represent macro geographic units such as police beats, census block groups or enumeration districts, as prior operationalizations of “community” suggested (Smith, 1986). Communities in Cincinnati may have problems or concerns that result in the exercise of varying degrees of formal authority based on where an encounter occurs. Specifically, COP officers may exercise their formal authority differently than beat officers because COP officers may be more influenced by the nuances of where an encounter occurs.

**Crime Data**

All reported crimes known to the police were obtained from the CPD for the project period (April 1, 1997 through April 30, 1998). The crime data contained incidents as recorded by dispatch personnel and the location of the incidents. Crimes known to the police represent any reported incident recorded by the police division as a crime. These are official data and they have certain obvious limitations. First, they represent only those crimes reported to the police, and as previous research has noted, probably under estimate the “dark figure” of crime. Second, they represent an officer’s definition or determination of a crime, and have thereby been filtered through the officer’s perception of the situation. Finally, these data are collected by the police division and are open to manipulation since police organizations may want to record crimes to
portray their agency in the best light possible. However, these data do represent incidents that were important enough for a citizen to call the police and for the police to record as a crime (Roncek and Maier, 1991). Furthermore, like many police agencies, the CPD bases resource allocation decision-making on these crime data.

These data sources (systematic social observations of police officers, census information and crime data) were used to create the dependent variable and independent variables for the proposed analysis of police formal authority. Collectively, these data allow for the quantification of formal authority that involves arrest and, more importantly, nonarrest actions. The following sections will discuss the measurement of the dependent variable and the independent variables to be used in the proposed research.

THE DEPENDENT VARIABLE—THE FORMAL AUTHORITY SCALE (FAS)

The dependent variable is based on a formal authority scale (FAS), which will be measured on an 8-point ordinal scale indicating varying degrees of coercive control (see Table 3.1). Formal authority scale actions taken during the encounter will be counted and summed, creating an outcome measure that ranges from zero to eight FAS actions. Although the formal authority scale is ranked in descending order from eight to zero, each action taken will count for one-point on the outcome variable. In other words, regardless of which actions are used, when three actions are taken the FAS score for will be a 3.

The purpose of the proposed research is to understand how police officers handle citizens by quantifying the various outcomes of police-citizen encounters that range from an officer doing “nothing” to a citizen to an officer making an arrest (Black, 1980). These actions are rank-ordered in accordance to the potential severity of the police action for the citizen, the formal and
informal nature of the police action, and the intrusiveness of the police action into the life of the encountered citizen. The following is a brief review of the formal authority scale and how each category of the dependent variable is ranked (see Chapter 2: *Constructing the Proposed Formal Authority Scale (FAS)* for a detailed review of the dependent variable).

**Measurement Categories of the Formal Authority Scale (FAS)**

When a full-custody arrest is made the police action will be coded 8, representing the highest degree of formal authority on the proposed FAS. When a citation is issued the police action will be coded 7 on the proposed FAS. When the police file or promise to file an official report regarding a citizen the police action will be coded 6 on the proposed FAS. Physical searches by the police will be coded 5 on the proposed FAS. Police checks for a prior criminal record will be coded 4 on the proposed FAS. When a citizen experiences an imposed or threatened solution or action by the police the action will be coded 3 on the proposed FAS. When an officer discusses a situation or suggests a course of action with a citizen the action will be coded 2 on the proposed FAS. Police officers often begin encounters with citizens by first asking them questions in order to regulate the interaction (Sykes and Brent, 1980). This usually requires that an officer gather a minimal amount of information from the citizen like the citizen’s name and an explanation from the citizen regarding the behavior that brought them to the attention of the police. When this occurs the action will be coded 1 on the proposed FAS (see Table 3.1).
Table 3.1 - Description of Dependent Variable [Formal Authority Scale (FAS)]

<table>
<thead>
<tr>
<th>Police Action</th>
<th>Description</th>
<th>FAS Value/Rank</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest</td>
<td>Whether an officer took a citizen into custody</td>
<td>8</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citation</td>
<td>Whether an officer issued a citation to a citizen</td>
<td>7</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Report</td>
<td>Whether an officer filed or promised to file an official report regarding a citizen</td>
<td>6</td>
<td>Encounter Instrument</td>
</tr>
<tr>
<td>Search</td>
<td>Whether an officer conducted a physical search of a citizen or property within the citizen’s immediate control</td>
<td>5</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Criminal History Check</td>
<td>Whether an officer checked official sources for prior criminal conduct regarding a citizen</td>
<td>4</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Imposed/Threatened Action</td>
<td>Whether an officer imposed or threatened a course of action regarding a citizen</td>
<td>3</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Discussed/Suggested Action</td>
<td>Whether an officer discussed or suggested a course of action regarding a citizen</td>
<td>2</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Gathering Limited Information</td>
<td>Whether an officer gathered limited information about a citizen</td>
<td>1</td>
<td>Citizen Instrument</td>
</tr>
</tbody>
</table>

**INDEPENDENT VARIABLES**

The models analyzed in this dissertation utilize individual, situational and community level independent variables. The following sections describe how each study variable will be measured and coded.

*Individual Level*

The individual demographic characteristics of officers were measured using data taken from the ride instrument coding form. For each field observation observers collected this information by asking the officer a series of questions. Officer gender is measured as a dummy
variable where 0 = male and 1 = female. Officer race is also measured as a dummy variable where 0 was assigned to white/Caucasian officers and nonwhite officers were coded 1. Of the observations conducted with nonwhite officers, 99.7% of the observations were conducted with African American officers and only 0.3% of the observations were conducted with Asian officers. No observations were conducted with officers identified as Hispanic or any other racial/ethnic group (see Table 3.2).

Officer assignment refers to the type of officer observed. It is measured as a dummy variable where 0 = beat officer and 1 = COP officer. Officer length of service is measured on an interval scale in number of years. The range of length of service is one to twenty-seven years, with an overall mean tenure of 7.33 years with the CPD. Finally, education is measured on an ordinal scale indicating the highest level of education attained by the officer at the time of the observation. Education was coded as 1 = high school graduate or GED equivalent, 2 = some college or trade school, 3 = graduated college or trade school, 4 = some post-graduate work, and 5 = an advanced degree.20 Table 3.2 provides a summary of how each individual level independent variable will be measured and coded.

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20 In Ohio individuals can not become peace officers without at least a high school diploma or GED equivalent, thus no lower educational attainment was necessary. Although it would have been preferable to disaggregate “trade school” and “college” degree because these two types of educational experiences are quite different, the original data did not delineate between these two types of educational attainment.
Table 3.2 - Description of Individual Level Independent Variables

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Measurement</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer Gender</td>
<td>Gender of officer</td>
<td>0 = Male</td>
<td>Ride Instrument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Female</td>
<td></td>
</tr>
<tr>
<td>Officer Race</td>
<td>Race of officer</td>
<td>0 = White</td>
<td>Ride Instrument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Non-White</td>
<td></td>
</tr>
<tr>
<td>Officer Assignment</td>
<td>Type of officer</td>
<td>0 = Beat</td>
<td>Ride Instrument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = COP</td>
<td></td>
</tr>
<tr>
<td>Length of Service</td>
<td>Number of years officer was member of CPD</td>
<td>Years</td>
<td>Ride Instrument</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Highest educational attainment of officer</td>
<td>1 = High School</td>
<td>Ride Instrument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Some college or trade school</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = College or trade school degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Some post graduate school</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 = Advanced degree</td>
<td></td>
</tr>
</tbody>
</table>

Situational Level

Data measuring variation in the situational characteristics of an encounter were obtained from the encounter instrument and citizen instrument coding forms. An encounter instrument was completed each time the observed officer engaged in an interaction with one or more citizens, capturing information regarding the context of the encounter. A citizen instrument was completed for each interaction with an individual citizen, capturing data on citizen characteristics and officer behavior toward the citizen.

Three legal variables will be used in this analysis: offense seriousness, evidence, and probable cause. Offense seriousness pertains to the criminal act in which the citizen was involved during the encounter with the observed police officer. For each full officer-citizen encounter the observer coded information regarding the nature of the immediate crime. The observer determined the level of seriousness based upon their observations and debriefings with the officer after the encounter. The observer coded the incident using a standard list of offenses. These offenses are coded by severity and measured on a 3-point ordinal scale, ranging from 0 =
no offense (if applicable), 1 = minor offenses or misdemeanors, and 2 = serious offenses or felonies. Table 3.3 summarizes how each of the situational level independent variables will be measured.

The evidence variable taps the extent of evidence indicating the citizen had committed a criminal offense. Four different types of evidence were considered: 1) whether the officer observed the citizen engage in an illegal act or viewed circumstantial evidence of an illegal act; 2) whether the officer observed physical evidence that implicated the citizen to an offense; 3) whether the officer heard claims from others which implicated the citizen in an offense; and, 4) whether the officer heard the citizen confess to the offense. These data were used to create a 4-point interval evidence scale. A point is calculated for each of the four criteria that occurred in the encounter. Therefore, evidence is measured on a scale from zero to four, with higher values indicating higher levels of evidence.

The probable cause variable measures whether the officer had probable cause to believe a citizen committed an offense. Probable cause is required by Ohio statute in order to actuate an arrest. If no probable cause to arrests exists during a police-citizen encounter it is more than reasonable to infer that doing something formal (like issuing a citation or making a full-custody arrest) was not a viable option to the officer. In other words, the exercise of formal authority through actions like arrest or citation is more likely when probable cause that an offense has occurred exists (Berger, 1972; Novak, 1999). Probable cause is measured as a dummy variable where 0 = no and 1 = yes (probable cause).

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21 In encounters where the citizen was arrested, observers coded the presence of evidence prior to the arrest.

22 This operationalization of evidence assumes all evidence criterion are given equal explanatory value. In other words, it is a measure of the quantity, not the quality, of evidence. Unfortunately, the existing data did not allow for further analysis of evidence quality.
Several extralegal variables were created for the analysis. Officer perceptions of a citizen can influence how an officer approaches and treats a citizen. Observers collected data on the roles officers’ placed on citizens at the beginning and end of the encounter. There were several citizen role categories: suspect, victim, disputant, service recipient, helpless person, 3rd party to the encounter, witness, quasi-police, non-police service provider, friend of the officer, and occupational acquaintance. In all likelihood, officers scrutinize citizens they think are engaged in wrongdoing more intensely than they do citizens they do not believe are lawbreakers. Officers may be more likely to investigate suspects (i.e., request information, conduct criminal record checks and physical searches, or suggest or impose courses of action to address a suspect’s behavior), thereby asserting more formal authority than they would with other citizens. Therefore, whether a citizen is considered a suspect by the officer will be used as a control variable. Citizen role is coded as a dummy variable where 0 = never a suspect in the encounter and 1 = suspect.

As discussed in Chapter 2, a citizen’s criminal status is a measure of respectability that might influence the quantity of law officers’ exercise (Black, 1976). Citizens with a prior record of criminal conduct (which is usually ascertained through official records or an officer’s personal knowledge) will experience higher degrees of law than someone who has no such record (Black, 1976; Myers, 1980; Avakame, et al., 1999). For instance, officers may be more likely to conduct a physical search, file an official report, or take other actions against such citizens. Accordingly, as a control variable, a measure of citizen respectability is included. Citizen respectability will be measured as a dummy variable where 0 = no prior criminal record was discovered by the officer and 1 = citizen has a prior criminal record.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Measurement</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offense Seriousness</td>
<td>Level of seriousness of the offense of citizen during encounter</td>
<td>0 = No crime, 1 = Minor offense/ misdemeanor, 2 = Serious offense/felony</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Evidence</td>
<td>Extent of evidence observed, including circumstantial, physical, claims from others and confession</td>
<td>0 = No evidence, 1 = One evidence criteria, 2 = Two evidence criterion, 3 = Three evidence criterion, 4 = Four evidence criterion</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Probable Cause</td>
<td>Whether officer had probable cause to believe citizen committed an offense</td>
<td>0 = No, 1 = Yes</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Gender</td>
<td>Gender of citizen</td>
<td>0 = Male, 1 = Female</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Race</td>
<td>Race of citizen</td>
<td>0 = White, 1 = Non-White</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Age (juvenile)</td>
<td>Whether citizen was a juvenile</td>
<td>0 = 18 +, 1 = Preschool - 17</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Demeanor</td>
<td>Level of deference displayed by citizen</td>
<td>0 = Deferential, 1 = Not deferential</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>Whether crime was committed in presence of officer</td>
<td>0 = No crime, 1 = Minor offense/ misdemeanor, 2 = Serious offense/felony</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Intoxication</td>
<td>Whether citizen was under influence of drugs or alcohol</td>
<td>0 = No signs of intoxication, 1 = signs of intoxication</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Role</td>
<td>Whether citizen was considered a suspect by police during encounter</td>
<td>0 = Never Suspect, 1 = Suspect</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Respectability</td>
<td>Whether citizen has prior involvement with the legal system</td>
<td>0 = No prior record, 1 = Prior record</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Residency</td>
<td>Whether citizen lives, works or owns property near encounter</td>
<td>0 = Non-resident, 1 = Resident</td>
<td>Citizen Instrument</td>
</tr>
<tr>
<td>Citizen Bystanders</td>
<td>Number of citizens at the scene of encounter</td>
<td>Number</td>
<td>Encounter Instrument</td>
</tr>
<tr>
<td>Officer/Supervisor Bystanders</td>
<td>Other officers at the scene of encounter</td>
<td>Number</td>
<td>Encounter Instrument</td>
</tr>
<tr>
<td>Officer-Citizen Race Combination</td>
<td>Racial congruence between officer and citizen</td>
<td>White officer-White citizen, White officer-Black citizen, Black officer-Black citizen, Black officer-White citizen</td>
<td>Encounter &amp; Citizen Instrument</td>
</tr>
</tbody>
</table>
Citizen gender is measured as a dummy variable where 0 = male and 1 = female. Observers used five different categories, including white/Caucasian, black/African American, Hispanic, Asian, American Indian and “other or undetermined,” to code citizen race. For purposes of the proposed research, citizen race is coded as a dummy variable in a similar fashion as officer race (e.g., 0 = white, 1 = nonwhite). There were very few observed encounters between police and Hispanics (0.6%), Asian (0.2%), American Indians (0.1%) and “other” racial groups of citizens (0.1%). As such, citizens with these racial characteristics were combined with African-Americans (who made up 55.4%) and categorized as nonwhite.23

Citizen age was coded by utilizing the following eight categories: preschool, 6-12 years, 13-17, 18-29, 20-44, 45-59 and 60+. As described in Chapter 2, there are theoretical justifications to believe police officers may interact with juveniles differently due to their hypothesized reduced status (Black, 1976). Because of their legal and social status, juvenile citizens are subject to a different set of laws and regulations. Therefore, citizen age is coded as a dummy variable where 0 = citizens age 18 and older and 1 = all citizens age 17 and under.

Citizen demeanor attempts to measure the attitude and deference the citizen pays to the officers’ authority or the officers’ requests. Originally, observers coded citizen demeanor on a five category scale: 1 = very deferential (i.e., citizen does everything officer wants and makes attempts to please the officer); 2 = merely civil (i.e., citizen does what officer wants, but does not go out of his/her way to please officer); 3 = passive aggressive (i.e., citizen does what officer wants, but body language or verbal cues hint that the citizen is upset); 4 = moderately hostile

23 Hispanic is an ethnicity, not a separate race. In fact, Hispanic citizens could be classified as either white or black. However, the original data collection instrument coded Hispanic citizens as a separate race (see question 9 in the Citizen Instrument). Observers were not able to code citizens as white-Hispanic or black-Hispanic. As such, for the purposes of this research Hispanic citizens will be classified as “non-white.”
(i.e., citizen verbally expresses that the citizen is upset with the officer, and this is obvious to the officer as well); and, 5 = highly hostile or disrespectful (i.e., blatant disrespect, swearing, expressing extreme personal insults about officer). Higher values on this ordinal scale indicated greater levels of disrespect. Several other operationalizations of demeanor have been used in extant research examining the influence of demeanor. Lundman (1994: 637) argued, “there is no basis for arguing that one representation is superior to another.” Differences in citizen demeanor appear to be a matter “of kind rather than degree, for the measurement of which an ordinal scale is inappropriate” (Worden et al. 1996: 330). Therefore, for purposes of this research citizen demeanor is coded as a dummy variable where 0 = deferential (civility) and 1 = not deferential (moderately or highly disrespectful).

In addition to citizen demeanor, it is important to control for criminal behavior committed in the presence of the officer (Klinger, 1994; Klinger, 1996a; Klinger, 1996b; Worden and Shepard, 1996; Engel, et al., 2000). In accordance with this research, a control variable of in-presence crime was coded as 0 = no offense (if applicable), 1 = minor offenses or misdemeanors, and 2 = serious offenses or felonies if there was a criminal act committed by the citizen in the presence of the observed officer.

Observers also assessed citizen intoxication. Observers reported whether the citizen involved in the encounter showed any signs of intoxication, by either alcohol or drugs. This variable is coded as a dummy variable where 0 = no signs of intoxication and 1 = any signs of intoxication on the part of the citizen.

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24 During encounters where the citizen was arrested, observers’ coded citizen demeanor before the citizen was arrested. This was done because a citizen’s demeanor could change dramatically after an arrest and because pre-arrest demeanor would obviously be more likely to influence officer decision making. Additionally, observers coded demeanor as legally permissible behavior (Klinger, 1994).
Whether a citizen was a resident of the community where the encounter occurred may also impact officer behavior. Residents may be seen as more legitimate community members and may experience less or lower degrees of formal authority than nonresidents or strangers to the encounter location/area. Citizen residency is coded as a dummy variable where \( = 0 \) nonresident and \( 1 \) = there was any indication the citizen lives, owns property, and/or works in the area where the encounter occurred.

It is reasonable to believe police officers may act differently when there are other officers and citizens present who are not part of the encounters; indeed, an officer’s behavior may be influenced by the presence of witnesses and the type of witnesses to an encounter. The number of citizen bystanders at the scene of an encounter will be included in the analysis. Observers recorded the maximum number of citizens present at the scene. The number of citizen bystanders is measured on an interval scale, ranging from 0 to 99.

When other police officers or supervisors are present during an encounter, the officer who initiated the encounter is subject to a form of “peer review.” This may influence the use of actions that are concrete and measurable by supervisors, such as the issuance of citations or arrests (Wilson, 1968; VanMaanen, 1973). Observers recorded the maximum number of other police division officers and supervisors present at the scene. This variable ranges from 0 to 50, and is measured on an interval scale. It should be noted that in most of the observed police-citizen encounters the number of other officers or supervisors present was low. Three or fewer additional officers/supervisors were present in 91 percent of the observed encounters; indeed, only one observation occurred in the presence of 50 other officers.

According to Black’s theory, police officers are predisposed to act on cultural expectations related to race and ethnicity (Black, 1976; Mastrofski, et al., 2000). All else being
equal, when an officer and citizen are of the same race or ethnicity, officers are more likely to be lenient and less likely to exercise formal authority to its fullest degree, and vice versa. Accordingly, a variable comparing officer and citizen race is included to assess how officers treat same- and different-race citizens. This nominally measured variable will be coded 0 = white officer-white citizen, 1 = white officer-black citizen, and 2 = black officer-black citizen. The officer-citizen race combination of black officer-white citizen (coded as 3) will be the excluded category in the analysis.

**Community Level**

Data on neighborhood structural variance was obtained from either the crime data or census data outlined above. The crime rate for the community was calculated by using crimes known to the police collected by the CPD during the project period (April 1, 1997 to April 30, 1998), and was computed using all of the crimes as classified by the FBI as Part I or Part II crime. A crime rate for each community was computed by summing all of the Part I and Part II crimes known to the police during the project period and dividing by the number of persons residing in the community. The crime rate is a ratio level variable. Table 3.4 summarizes the community level independent variables.

Residential stability is measured in two separate ways. First, the percent of persons not living in the community for at least five years was computed. This was calculated by using the

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25 Information was based on the community where the encounter occurred. Observers indicated the community where the encounter occurred in the encounter instrument, as well as the exact geographic address of the encounter (see Appendix III, questions 6 and 7). These community indications were reconciled against each other using computer mapping software.

26 Conceptually it makes sense to evaluate the influence of Part I and Part II crimes separately because they measure two different constructs. Specifically, Part II crimes are a better measure of arrest data rather than crime per se, they are considered much less serious than Part I crimes and are probably less valid or reliable than their counterparts due to under-reporting. However, because these two crime types were closely related statistically they were combined into one overall measurement of crime (b = .729; p < .01).
number of persons indicating that they had not resided within the same household during the full five-year period before the Census data were collected and dividing by the total number of persons residing in the community. This variable is a ratio level variable, and ranges from 21 to 67. Additionally, the percent of renter occupied housing units was computed by dividing the total number of rental occupied housing units by the total number of occupied housing units. This variable is a ratio level variable, and ranges from 22 to 98. It follows that higher scores for each of these indicators indicate higher levels of residential instability.

**Table 3.4 - Description of Community Level Independent Variables**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Measurement</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Rate</td>
<td>Percent of Part I and Part II crimes per community residents</td>
<td>Number of crimes divided by community population multiplied by 100</td>
<td>Crime Data (1997 &amp; 1998)</td>
</tr>
<tr>
<td>Residential Mobility</td>
<td>Percent of residents not residing in community 5 years before census per community residents</td>
<td>Number persons living elsewhere divided by community population multiplied by 100</td>
<td>Census Data (1990)</td>
</tr>
<tr>
<td>Renter Occupied</td>
<td>Percent of rental occupied dwelling units in community</td>
<td>Number renter occupied units divided by total occupied dwelling units multiplied by 100</td>
<td>Census Data (1990)</td>
</tr>
<tr>
<td>Non-white</td>
<td>Percent of non-white residents in community per community residents</td>
<td>Number African-American, Hispanic, American Indian, Asian and other persons divided by community population multiplied by 100</td>
<td>Census Data (1990)</td>
</tr>
<tr>
<td>Poverty</td>
<td>Percent of persons living below the poverty line per community residents</td>
<td>Number of persons living below the poverty line divided by total number of persons in community for which poverty status could be determined multiplied by 100</td>
<td>Census Data (1990)</td>
</tr>
<tr>
<td>Single Family</td>
<td>Percent of families with children with only one parent present per community residents</td>
<td>Number of families with children with only one parent present divided by total number of families with children multiplied by 100</td>
<td>Census Data (1990)</td>
</tr>
<tr>
<td>Socioeconomic Distress</td>
<td>Index</td>
<td>Sum of percent poverty and percent single family</td>
<td>Census Data (1990)</td>
</tr>
</tbody>
</table>
Racial composition of the community was calculated by dividing the total number of nonwhite residents by the total number of residents. This variable is a ratio level variable, and ranges from one to 97. Economic distress was measured by calculating the percent of persons living in poverty, for which poverty status could be determined. This was done by dividing the number of persons living below the poverty line by the total number of persons within the community. Percent below poverty is a ratio level variable and ranges from one to 78, where higher values indicate higher levels of community economic distress.

Finally, household structure was determined by calculating the percent of families in the community with children where there is only one parent present (e.g., proportion single-parent households). This variable was created by dividing number of single-parent families by the total number of families within the community. This ratio level variable ranged from zero to 98, where higher values indicate higher proportions of single-parent families. The data for each of these variables were obtained from the 1990 Census of Population (U.S. Department of Commerce 1994).

One problem with including several different community level correlates of behavior is the increased risk of multicollinearity. One solution to this problem is to create a variable that measures socioeconomic distress. Following the approach used by Mastrofski, et al., 2000, socioeconomic distress was measured as the sum of the percent single family households and percent living in poverty (Sampson, et al., 1997). The range of values on this index is three to 176. Based on the coding of these variables used in the index, low values are representative of

\[ \text{Percent above poverty} \times \text{Percent single-parent households} \]

27 The Census reported the number of persons above and below the poverty line for individuals for which poverty status could be determined. Though status level could not be determined for all persons surveyed by the Census, those for whom status could not be determined represented a minority of the population. Poverty could be determined for 96.41 percent of the population. Therefore, the number of non-respondents should not significantly affect the measurement of this variable.
lower levels of community disorganization and distress, while higher values correspond to greater levels of community disorganization and distress.

**DESCRIPTION OF THE SAMPLE**

From April 1, 1997 through April 30, 1998, Frank (1996) and his research team conducted 442 systematic social observations with officers of the Cincinnati Police Division. As discussed in Chapter 2, the focus of the proposed study will be on quantifying the amount of law police use against individual suspects. The proposed study focuses on all “full” encounters between the police and citizens where a citizen instrument was completed. In comparison to the data collection protocols for full encounters in the larger study, the collection protocols for encounters classified as being “brief” or “casual” resulted in the recording of limited information on police actions and citizen characteristics. The data collected from brief and casual police-citizen encounters do not contain relevant information on the dependent variable and many of the independent variables proposed for this analysis. Consequently, encounters that were casual or brief will not be used in the proposed research. This results in a sub-sample of 892 individuals who experienced a full encounter with a CPD officer (n = 892).

The dependent variable for the proposed research is a formal authority scale score calculated for each citizen in an encounter by counting the number of FAS actions taken against a citizen. If a citizen experiences every action listed on the proposed formal authority scale, the result would be a FAS score of eight, the highest possible FAS score. Table 3.5 provides frequencies on the dependent variable. Table 3.5 contains other information that may be useful in understanding how often each FAS action is taken. Frequencies for the use of each police action are provided. In addition, a count of how often officers’ used multiple actions is provided.
For instance, 48 citizens experienced five different actions, 16 citizens experienced six different actions on the formal authority scale, and only one citizen experienced all eight formal authority scale actions (see Table 3.5; *Number of Different FAS Actions Taken*).

It is important to note here an important independent variable that is very much related to the outcome measure. The highest degree of formal authority exercised by the police against a citizen is also reported, and will be used a control variable in the analysis (see Table 3.6: *Description of Independent Variables for Sub-Sample, Highest Degree of Formal Authority Exercised*). This is a measure of the most severe action taken against a citizen; it is not a measure of the number of different actions. For instance, while it is possible that the 35 citizens who were physically searched experienced other police actions like a warrant or prior record check, the most severe action taken against 35 citizens in the sample was a physical search. 251 citizens experienced no more formal authority than an official report being filed, and 127 experienced no more law than a citation. The relevance of this measure as a control variable will be discussed in more detail in Chapter 4. Table 3.6 provides the frequencies on the remaining independent variables to be used in the analysis.

**ANALYSIS**

The intent of this dissertation is to examine the factors that influence officer use of formal authority in their encounters with and citizens. Several steps will be taken to facilitate this analysis. First, a descriptive analysis was conducted on the dependent variable and the individual, situational and community-level correlates to be used in this study. This was done according to the level of measurement for each variable, and the appropriate frequencies, means and standard deviations are reported (see Table 3.5 and Table 3.6).
The analysis will proceed in the following manner. First, a bivariate model and correlation matrix will be calculated for the independent variables in order to examine model adequacy. Multicollinearity will be tested by examining the bivariate relationships between each of the independent variables where pairs of variables correlated at levels greater than 0.7 suggest the presence of collinearity. Each of the independent variables will be regressed on the other independent variables, and the $R^2$ for each analysis will be examined (Berry and Feldman, 1985). $R^2$ values of 0.50 or greater suggest multicollinearity between collections of the independent variables. If no multicollinearity is discovered, the analysis will proceed to the next stage.

Second, multivariate analysis appropriate for count data (which is the nature of the dependent variable) will be conducted using Poisson regression to determine which of the independent variables explain variance in the dependent variable. Through Poisson regression analyses the relationship between each level of the independent variables (individual, situational and community) and the dependent variable (the number of FAS actions used) can be explained while the other two levels are statistically controlled (Blalock, 1979; Hanushek and Jackson, 1977).

**STRENGTHS AND LIMITATIONS OF THE CURRENT STUDY**

This dissertation attempts to fill a void in the current research on police-citizen encounters by exploring police actions that lay between an officer doing “nothing” and an officer making an arrest. Through the measurement of all actions taken by police in their encounters with citizens, the concept of law or formal authority can be more fully explored. In addition, this research will provide a more contemporary examination of the outcomes of police-citizen encounters.
Table 3.5 - Description of Dependent Variable for Sub-Sample

<table>
<thead>
<tr>
<th>Name</th>
<th>Values</th>
<th>Frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Different FAS Actions Taken</td>
<td>Number; Range = 0 - 8</td>
<td>(\bar{x} = 2.20; \text{ sd} = 1.50)</td>
<td></td>
</tr>
<tr>
<td>Number of Different FAS Actions Taken</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 FAS Actions</td>
<td>1 (0.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 FAS Actions</td>
<td>7 (0.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 FAS Actions</td>
<td>16 (1.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 FAS Actions</td>
<td>48 (5.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 FAS Actions</td>
<td>96 (10.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 FAS Actions</td>
<td>163 (18.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 FAS Actions</td>
<td>223 (25.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 FAS Action</td>
<td>251 (28.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 FAS Actions</td>
<td>87 (9.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Actions Taken</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrest</td>
<td>Yes: 91 (10.2%)</td>
<td>No: 801</td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td>Yes: 158 (17.7%)</td>
<td>No: 734</td>
<td></td>
</tr>
<tr>
<td>Report</td>
<td>Yes: 389 (43.6%)</td>
<td>No: 149</td>
<td></td>
</tr>
<tr>
<td>Search</td>
<td>Yes: 149 (16.7%)</td>
<td>No: 382</td>
<td></td>
</tr>
<tr>
<td>Warrants/Prior Record Check</td>
<td>Yes: 382 (42.8%)</td>
<td>No: 382</td>
<td></td>
</tr>
<tr>
<td>Imposed/Threatened Action</td>
<td>Yes: 125 (14.0%)</td>
<td>No: 125</td>
<td></td>
</tr>
<tr>
<td>Discussed/Suggested Action</td>
<td>Yes: 469 (52.6%)</td>
<td>No: 469</td>
<td></td>
</tr>
<tr>
<td>Gathering Limited Information Presence</td>
<td>Yes: 200 (22.4%)</td>
<td>No: 200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes: 87 (9.8%)</td>
<td>No: 87</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>892</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3.6 - Description of Independent Variables for Sub-Sample

<table>
<thead>
<tr>
<th>Name</th>
<th>Values</th>
<th>Frequency*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Level Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer Gender</td>
<td>0 = Male</td>
<td>755 (84.6%)</td>
</tr>
<tr>
<td></td>
<td>1 = Female</td>
<td></td>
</tr>
<tr>
<td>Officer Race</td>
<td>0 = White</td>
<td>517 (58.0%)</td>
</tr>
<tr>
<td></td>
<td>1 = Nonwhite</td>
<td></td>
</tr>
<tr>
<td>Officer Assignment</td>
<td>0 = Beat</td>
<td>633 (71.0%)</td>
</tr>
<tr>
<td></td>
<td>1 = COP</td>
<td></td>
</tr>
<tr>
<td>Length of Service</td>
<td>Years; Range 1 - 27</td>
<td>7.33; sd = 6.51</td>
</tr>
<tr>
<td>Level of Education</td>
<td>1 = High School</td>
<td>142 (15.9%)</td>
</tr>
<tr>
<td></td>
<td>2 = Some college or trade school</td>
<td>413 (46.3%)</td>
</tr>
<tr>
<td></td>
<td>3 = College or trade school degree</td>
<td>271 (30.4%)</td>
</tr>
<tr>
<td></td>
<td>4 = Some post graduate school</td>
<td>37 (4.1%)</td>
</tr>
<tr>
<td></td>
<td>5 = Advanced degree</td>
<td>29 (3.3%)</td>
</tr>
<tr>
<td><strong>Situational Level Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Degree of Formal Authority Exercised</td>
<td>8 = Arrest</td>
<td>91 (10.2%)</td>
</tr>
<tr>
<td></td>
<td>7 = Citation</td>
<td>127 (14.2%)</td>
</tr>
<tr>
<td></td>
<td>6 = Report</td>
<td>251 (28.1%)</td>
</tr>
<tr>
<td></td>
<td>5 = Search</td>
<td>35 (3.9%)</td>
</tr>
<tr>
<td></td>
<td>4 = Warrants/Prior Record Check</td>
<td>94 (10.5%)</td>
</tr>
<tr>
<td></td>
<td>3 = Imposed/Threatened Action</td>
<td>28 (3.1%)</td>
</tr>
<tr>
<td></td>
<td>2 = Discussed/Suggested Action</td>
<td>160 (17.9%)</td>
</tr>
<tr>
<td></td>
<td>1 = Gathering Limited Information</td>
<td>19 (2.1%)</td>
</tr>
<tr>
<td></td>
<td>0 = Presence</td>
<td>87 (9.8%)</td>
</tr>
<tr>
<td>Offense Seriousness</td>
<td>0 = No crime</td>
<td>644 (72.2%)</td>
</tr>
<tr>
<td></td>
<td>1 = Minor offense/ misdemeanor</td>
<td>185 (20.7%)</td>
</tr>
<tr>
<td></td>
<td>2 = Serious offense/felony</td>
<td>63 (7.1%)</td>
</tr>
<tr>
<td>Evidence</td>
<td>0 = No evidence</td>
<td>569 (63.8%)</td>
</tr>
<tr>
<td></td>
<td>1 = One evidence criteria</td>
<td>158 (17.7%)</td>
</tr>
<tr>
<td></td>
<td>2 = Two evidence criterion</td>
<td>90 (10.1%)</td>
</tr>
<tr>
<td></td>
<td>3 = Three evidence criterion</td>
<td>60 (6.7%)</td>
</tr>
<tr>
<td></td>
<td>4 = Four evidence criterion</td>
<td>15 (1.7%)</td>
</tr>
<tr>
<td>Probable Cause</td>
<td>0 = No</td>
<td>641 (71.9%)</td>
</tr>
<tr>
<td></td>
<td>1 = Yes</td>
<td>251 (28.1%)</td>
</tr>
<tr>
<td>Citizen Gender</td>
<td>0 = Male</td>
<td>525 (58.9%)</td>
</tr>
<tr>
<td></td>
<td>1 = Female</td>
<td>367 (41.9%)</td>
</tr>
<tr>
<td>Citizen Race</td>
<td>0 = White</td>
<td>389 (43.6%)</td>
</tr>
<tr>
<td></td>
<td>1 = Non-White</td>
<td>503 (56.4%)</td>
</tr>
<tr>
<td>Citizen Age (juvenile)</td>
<td>0 = 18 +</td>
<td>758 (85.0%)</td>
</tr>
<tr>
<td></td>
<td>1 = Preschool - 17</td>
<td>134 (15.0%)</td>
</tr>
<tr>
<td>Demeanor</td>
<td>0 = Deferential</td>
<td>804 (90.1%)</td>
</tr>
<tr>
<td></td>
<td>1 = Not deferential</td>
<td>88 (9.9%)</td>
</tr>
</tbody>
</table>
Table 3.6 - Description of Independent Variables for Sub-Sample (Continued)

<table>
<thead>
<tr>
<th>Name</th>
<th>Values</th>
<th>Frequency*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situational Level Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>0 = No crime</td>
<td>803 (90.0%)</td>
</tr>
<tr>
<td></td>
<td>1 = Minor offense/misdemeanor</td>
<td>76 (8.5%)</td>
</tr>
<tr>
<td></td>
<td>2 = Serious offense/felony</td>
<td>13 (1.5%)</td>
</tr>
<tr>
<td>Intoxication</td>
<td>0 = No signs of intoxication</td>
<td>813 (91.1%)</td>
</tr>
<tr>
<td></td>
<td>1 = signs of intoxication</td>
<td>79 (8.9%)</td>
</tr>
<tr>
<td>Citizen Role</td>
<td>0 = Never Suspect</td>
<td>454 (50.9%)</td>
</tr>
<tr>
<td></td>
<td>1 = Suspect</td>
<td>438 (49.1%)</td>
</tr>
<tr>
<td>Citizen Respectability</td>
<td>0 = No prior record</td>
<td>658 (73.8%)</td>
</tr>
<tr>
<td></td>
<td>1 = Prior record</td>
<td>234 (26.2%)</td>
</tr>
<tr>
<td>Citizen Residency</td>
<td>0 = Resident</td>
<td>541 (60.7%)</td>
</tr>
<tr>
<td></td>
<td>1 = Non-resident</td>
<td>351 (39.3%)</td>
</tr>
<tr>
<td>Citizen Bystanders</td>
<td>Years; Range 0 - 99</td>
<td>(\bar{x} = 3.69; sd = 8.97)</td>
</tr>
<tr>
<td>Officer/Supervisor Bystanders</td>
<td>Years; Range 0 - 50</td>
<td>(\bar{x} = 1.89; sd = 3.08)</td>
</tr>
<tr>
<td>White officer-White citizen**</td>
<td>0 = Other racial pairing</td>
<td>620 (69.5%)</td>
</tr>
<tr>
<td></td>
<td>1 = White officer-White citizen</td>
<td>272 (30.5%)</td>
</tr>
<tr>
<td>White officer-Black citizen</td>
<td>0 = Other racial pairing</td>
<td>647 (72.5%)</td>
</tr>
<tr>
<td></td>
<td>1 = White officer-Black citizen</td>
<td>245 (27.5%)</td>
</tr>
<tr>
<td>Black officer-Black citizen</td>
<td>0 = Other racial pairing</td>
<td>640 (71.7%)</td>
</tr>
<tr>
<td></td>
<td>1 = Black officer-Black citizen</td>
<td>252 (28.3%)</td>
</tr>
<tr>
<td>Black officer-White citizen</td>
<td>0 = Other racial pairing</td>
<td>782 (87.7%)</td>
</tr>
<tr>
<td></td>
<td>1 = Black officer-White citizen</td>
<td>110 (12.3%)</td>
</tr>
<tr>
<td>Community Level Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime Rate</td>
<td>Percent</td>
<td>(\bar{x} = 14.09; sd = 7.35)</td>
</tr>
<tr>
<td>Residential Mobility</td>
<td>Percent</td>
<td>(\bar{x} = 48.29; sd = 9.19)</td>
</tr>
<tr>
<td>Renter Occupied</td>
<td>Percent</td>
<td>(\bar{x} = 66.23; sd = 18.69)</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>Percent</td>
<td>(\bar{x} = 47.41; sd = 32.84)</td>
</tr>
<tr>
<td>Poverty</td>
<td>Percent</td>
<td>(\bar{x} = 31.23; sd = 21.41)</td>
</tr>
<tr>
<td>Single-Family</td>
<td>Percent</td>
<td>(\bar{x} = 49.48; sd = 23.67)</td>
</tr>
<tr>
<td>Socioeconomic Distress</td>
<td>Index</td>
<td>(\bar{x} = 80.68; sd = 43.26)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N = 892)</td>
</tr>
</tbody>
</table>

*Missing values for each variable not reported.  **Category will be excluded in the analyses.
Much of the extant research on police officer behavior that is based on systematic social observations is dated and was conducted prior to the current paradigm in policing, community policing. This dissertation uses data collected in 1997 and 1998, in a large police department actively engaging in community policing. Examinations of the influences of individual, situational and community-level correlates of officer behavior may reveal that these factors have varying influences on officer behavior in this era of community policing.

This research has the potential to reveal important nuances with regard to how officers address citizens. Research that relies on outcome measures that focus on arrest may not provide a full picture of how officers exercise their formal authority. By focusing on all of the actions an officer takes against a citizen, this research operationalizes Black’s (1976; 1980) concept of law in such a way that it may better enable us to understand styles of policing. For example, research suggests that compared to male officers female officers are less likely to use arrest (Sherman, 1975; Balkin, 1988; Riksheim and Chermak, 1993). Examining the quantity of law used against citizens in its totality, rather than by the most severe action taken against a citizen, may reveal that male and female officers do not differ in the amount of formal authority they exercise to control citizens.

Similarly, this research may shed light on how citizens experience law enforcement and order maintenance. For example, an ongoing issue in policing research is whether black citizens experience more coercive social control than white citizens do (Browning, et al., 1994). To properly understand and research this issue, studies that go beyond perceptions of treatment (i.e., surveys) and beyond the outcome measure of arrest must be conducted. Outcome measures that focus on arrest may not provide a full picture of how officers exercise their formal authority with black citizens. Along the lines of race, disparities in social control as measured by arrest
outcomes may be largely attributable to situational correlates like legal factors and citizen demeanor. However, perceptions of police behavior towards blacks as overly coercive or “heavy-handed” may be supported through an examination of the use of formal authority that is less than arrest (Lundman, 1979; Smith and Visher, 1981; Browning, et al., 1994; Smith and Klein, 1984; Lundman, 1998; Engel, et al., 2000; Novak, et al., 2002).

Nevertheless, caution should be taken when attempting to interpret information gleaned from this dissertation. This research explains officer behavior by considering variances in individual, situational and community-level correlates. Empirical research and commentary suggest that organizational variance may have an impact on individual officer behavior (Wilson, 1968; Sherman, 1980; Smith and Klein, 1983; Smith, 1987; Riksheim and Chermak, 1993; Brooks, 1999). However, this study is unable to assess the impact of organizational level correlates because such an analysis is beyond the scope of the current investigation. All observations and data collected for the current study revolves around one police agency, the Cincinnati Police Division. Consequently, the data reflect no variance in organizational determinants of behavior. Future studies should consider incorporating all four levels of analysis.

Given the fact that the data reported are from one research site, generalizability is limited. Furthermore, while a substantial number of observations were conducted (442) and a large quantity of officer-citizen encounters were observed (3,685), the data represent only a small proportion of the number of shifts and citizen contacts done by the CPD over a given year. These observations represent a “snapshot” of officers and their work routines in the CPD. For example, these observations depict approximately the same number of tours of duty as two full-time officers over a one-year period. Accordingly, these data are too few “to serve as the basis
of a lasting and durable orthodoxy” of police officer behavior (Fyfe, 1996: 339). Furthermore, as
described earlier in this chapter, observations were only conducted on first or second shift or
when COP officers’ were on duty. No observations occurred between the hours of 11:00 p.m.
and 6:00 a.m. In their totality, these factors place limitations on the inferences that can be made
from the proceeding analysis. Notwithstanding these cautions, these data do provide significant
and important insight into how police officers exercise formal authority against citizens.

CHAPTER SUMMARY

This study examines dimensions of officer and citizen behavior during encounters with
one another. This chapter outlined the research questions under examination. Next, a review of
the CPD’s organizational arrangement was conducted. Then, the relevant data sources
(systematic social observations, crime data and census data) were described. The variables used
in this dissertation, including the dependent variables and the individual, situational and
community level independent variables were operationalized and their measurement defined.
Finally, a description of the sub-samples was provided and the plan for analysis diagramed. The
following chapter more fully analyzes the types of behavior under examination.
CHAPTER 4: ANALYSIS

This chapter examines the impact of individual, situational and community level correlates on officer use of formal authority in order to address the following research questions:

1. Do individual level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?
2. Do situational level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?
3. Do community level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?

First, correlation matrices are presented in order to examine the bivariate relationships and multicollinearity among the proposed predictors. Next, selection of the most appropriated analytical technique is discussed. This chapter concludes with the presentation of the results from the analyses of correlates at each level, and the total model including predictors from all three levels.

BIVARIATE RELATIONSHIPS

In order to detect multicollinearity between pairs of independent variables, separate bivariate correlation matrices were calculated for the individual, situational and community level correlates.\(^{28}\) Pairs of variables correlated at levels greater than 0.70 suggest the presence of collinearity. In addition, each of the independent variables was regressed on the other independent variables and the \(R^2\) for each analysis was examined for signs of multicollinearity. \(R^2\) values of 0.50 or greater suggest multicollinearity between collections of the independent variables.

\(^{28}\) There were a limited number of missing values across the various predictors (see Table 3.6). Mean substitution was used to replace all missing values.


**Individual Level Correlates**

For the individual level correlates, the Pearson’s Correlations range from 0.000 to 0.369. No $R^2$ value is greater than 0.137. Combined, this information indicates a lack of multicollinearity among the individual-level correlates. The bivariate correlation matrices and regressions to detect multicollinearity are presented in Appendix V.

**Situational Level Correlates**

The Pearson’s Correlations for the situational level correlates range from 0.002 to 0.768, and the $R^2$ values range from 0.10 to 0.667. Two of the proposed variables, and the proposed officer race-citizen race interaction variables, are a concern as they result in pairs that are highly correlated (approaching or above 0.70) and/or they result in $R^2$ values above 0.50. The first situational level correlate of concern is the “highest degree of formal authority exercised” variable.

The dependent variable in this analysis is a count variable, ranging from zero to eight, based on the number of formal authority scale (FAS) actions used against a citizen. The dependent variable is not a measure of the most severe or serious outcome on the FAS. Hence, the possible need to use a measure of the highest FAS action taken against a citizen as a control variable. It makes intuitive sense that as the quantity of formal authority exercised (the number of actions taken) increases, the severity of the formal authority actions taken should also increase. Accordingly, this relationship was explored.

The correlation between the dependent variable and highest FAS action taken variable is 0.768 ($p< 0.01$), and the regression of this predictor on the dependent variable yields an $R^2$ of 0.590. A scatterplot examination was created to explore the relationship between the number of FAS actions taken and the highest degree of formal authority exercised against citizens. The
totality of this information suggests that it is not necessary to use the highest degree of formal authority exercised as a control variable.

Figure 4.1 – Scatterplot of the Dependent Variable by the Highest FAS Action Taken

Figure 4.1 illustrates that as the highest degree of formal authority exercised increases, the number of formal authority actions (the dependent variable) also increases. There is a strong, positive relationship between the quantity of formal authority exercised and the severity of formal authority scale actions. In other words, there does not appear to be a need to statistically control for the most severe action taken as this relationship is already taken into account by the dependent variable and the strong, positive relationship with the severity measure. As such, the highest degree of formal authority exercised is not used in the final analysis as a control variable.

A second concern is the variable “probable cause.” The probable cause measure is correlated with “offense seriousness” at 0.621 (p< 0.01) and “quantity of evidence” at 0.621 (p< 0.01), and the R² values are 0.489 and 0.435, respectively. When the probable cause measure is
removed, the $R^2$ values for the regression equations for the remaining variables decrease, respectively, to 0.361 and 0.280 (these values are not reported in the correlation matrices).

Given the manner in which these two variables are operationalized, it is understandable that the quantity of evidence and probable cause variables are highly correlated. The measure of evidence used in this analysis is a 4-point interval scale that accounts for the quantity of observed or reported criminal behavior (see Chapter 3: Situational Level Correlates—Evidence). If any one of the four forms of evidence exists, the officer in all likelihood would have probable cause to believe a citizen committed an offense. Given the high correlation between the probable cause and quantity of evidence measures, and the likelihood that they are theoretically measuring the same phenomenon, the probable cause variable was not used in the final analysis.

Another concern among the situational level correlates is the use of interaction terms involving officer race and citizen race. Four dummy-coded interaction variables involving officer race-citizen race were explored. The correlations and $R^2$ values related to pairings of these variables that are above 0.70 and 0.50, respectively, are expected. When citizen race is regressed on the other independent variables without the officer race-citizen race variables, the $R^2$ changes from 0.986 (as shown in Appendix V: Table 2) to an $R^2$ of 0.049. Furthermore, preliminary analyses of several models exploring officer race, citizen race, and various combinations of the dummy-coded officer race-citizen race variables indicated that none of these variables are significant, or add to the explanatory power of the estimated models, when other factors are controlled. Therefore, none of the interaction variables accounting for officer race and citizen race are used in the analyses. Only the separate measures for officer race and citizen race are included in the final model.

---

29 “White officer-White Citizen” was treated as the excluded (reference) category (see Table 3.6).
The variable measuring the number of “Officer/Supervisor Bystanders” is correlated with the number of “Citizen Bystanders” variable at 0.682. The next highest correlation between any pairs of predictors is 0.499. Furthermore, when the number of officer/supervisor bystanders is regressed on the remaining independent variables (minus the previously discussed predictors), the $R^2$ for the model is 0.490. In the interest of parsimony and concern over multicollinearity, the number of officer/supervisor bystanders was not be used in the final analysis. Instead, the number of citizen bystanders was be included in the models.

**Community Level Correlates**

The Pearson’s correlations for the community level correlates range from 0.004 to 0.963. Several of the community level measures are highly correlated (see Appendix V, Table 4). To address the risk of multicollinearity, the variables measuring the percent of renters, percent of nonwhite residents, the percent living below the poverty line and the percent of single-family homes were excluded from the analyses. The variables for neighborhood crime rate, residential mobility and the measure of socioeconomic distress were used in the final analysis. As noted in Chapter 3, the socioeconomic distress measure is the sum of the percent single family households and the percent living in poverty. For these variables, the correlations range from 0.024 to 0.387, and no $R^2$ value is above 0.047.

**Total Model**

When all of the previously discussed predictors are included in the bivariate correlation matrix (see Appendix V, Table 3), the Pearson’s correlations for the individual and situational level correlates together range from 0.000 to 0.768, and the $R^2$ values range from 0.10 to 0.997. When the problematic variables discussed in the above sections are removed (i.e., highest FAS
action taken, probable cause and the officer race-citizen race dummy-coded variables), the
Pearson’s Correlations now range from 0.000 to 0.682. In addition, no $R^2$ value is above 0.490.

SELECTING THE MODEL FOR ANALYSES

**Poisson Regression Models (PRM)**

Although the dependent variable is metric in measurement, the distribution of the
dependent variable is similar to what is observed with count data. Using linear regression
techniques like ordinary least squares regression (OLS) for dependent variables based on count
data can result in parameter estimates that are “inefficient, inconsistent, and biased” (Long, 1997:
217; Gardner, et al., 1995). It is important to use analytical techniques that recognize and retain
the natural, meaningful scale of count data (Gardner, et al., 1995). Therefore, Poisson regression
models (PRM) will be used to analyze the data (Greene, 1995).\(^\text{30}\)

**Hierarchical Linear Models (HLM)**

Due to the multilevel nature of the data, hierarchical linear modeling was explored.\(^\text{31}\)
Many of the officers in this study encounter multiple citizens; over fifty percent of the observed
officers encountered ten or more different citizen, therefore, their data were duplicated in each

---

\(^{30}\) Negative binomial models (NBM) are also commonly used to examine count data. The decision to use PRM over
NBM was made by determining whether overdispersion existed—whether the variance was greater than the
mean—within the data. When overdispersion exists, using the negative binomial model is recommended over
PRM (Gardner, et al., 1995; Osgood, 2000). The mean of the dependent variable is 2.200 and the variance is
2.255. A negative binomial model was estimated to examine overdispersion and the appropriateness of a NBM
over a Poisson regression model. Results suggest that overdispersion is not an issue in the data (Chi-squared =
0.057, $p > 0.80$; Alpha = 0.9798), and the data appear to be equi-dispersed (Winkelmann, 2000).

\(^{31}\) HLM 5 is capable of estimating multi-level Poisson regression models. The independent variables in this
dissertation were collected at three levels: individual (officers), situational (citizens and encounter-related
characteristics) and community (neighborhoods). To simplify the analysis of the data through statistical
packages for hierarchical linear modeling (HLM 5) and other modeling techniques, the individual and
situational data were combined into one dataset, which then only required the estimation of a two-level model:
individual/situational level predictors (level 1) and community level predictors (level 2) (Raudenbush, et al.,
2000).
encounter. This may result in the underestimation of the size of the standard error for each of the individual (officer) level predictors (Bryk and Raudenbush, 1992; Mastrofski, et al., 2000).

Another issue related to the multilevel nature of the analysis is heteroskedasticity. Heteroskedasticity often exists among aggregate-level variables measured as proportions (such as the neighborhood-level characteristics used in this analysis) because the denominator in the proportion drives the magnitude of the overall estimate. Communities with greater numbers of observed encounters will include larger denominators in the proportions. Summary statistics calculated with smaller numbers are less stable, which results in an inflated standard error for aggregate level predictors. This makes it more difficult to reject the null hypotheses (Hanushek and Jackson, 1977). Including individual level predictors and aggregate level predictors in a pooled model results in biased statistical tests. In this case, the sample size of the community level predictors (n = 52) would be artificially inflated to the sample size of the individual/situational level variables (n = 892), making it easier to reject the null hypotheses (Novak, et al., 2002).

An unconditional HLM model was estimated (with no predictors) to assess the appropriateness of analyzing the data using a multilevel Poisson regression model. Examination the Chi-square statistic for the y-intercept (Chi-square = 49.0408, p > 0.500), indicating that, after accounting for the amount of variance explained at the individual/situational level, there was no significant amount of variance in the dependent variable to be explained at the aggregate level. Therefore, it was not necessary to conduct a multilevel PRM or conduct the analysis with the HLM 5 statistical package.
Based on the aforementioned exploratory findings, a decision was made to estimate Poisson regression models. The analyses proceeded using LIMDEP: Version 7.0, a statistical package designed to examine models with limited dependent variables.

RESULTS

The following section presents the Poisson regression analyses for the individual, situational and community level correlates. This is followed by an analysis all three levels of predictors regressed on the dependent variable.

Individual Level Model

Table 4.1 displays the regression of the individual level correlates on the number of formal authority scale actions taken in police-citizen encounters. Only one of the individual level correlates, officer length of service, is significantly related to the number of FAS actions used. There is a significant, negative relationship between officer length of service and the dependent variable. As the length of service of a Cincinnati Police Division (CPD) officer increases the number of FAS actions used in police-citizen encounters is more likely to decrease ($b = -0.019; p < 0.01$). In other words, CPD officers with more years of service are more likely to take fewer FAS actions against citizens than officers with fewer years of experience as a CPD officer. The Pseudo R-square measure, based on the Pearson residuals (Cameron and Trivedi, 1988), for the model indicates that the individual level correlates as a whole do not explain much (only 2 percent) of the variance in the number of FAS actions taken in police-citizen encounters.
Table 4.1 – Individual Level Correlates of the Use of Formal Authority Scale Actions

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>se</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer Sex</td>
<td>-0.079</td>
<td>0.066</td>
<td>0.230</td>
</tr>
<tr>
<td>Officer Race</td>
<td>-0.011</td>
<td>0.047</td>
<td>0.806</td>
</tr>
<tr>
<td>Officer Type</td>
<td>0.031</td>
<td>0.055</td>
<td>0.577</td>
</tr>
<tr>
<td>Officer Length of Service</td>
<td>-0.019**</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Officer Education</td>
<td>0.009</td>
<td>0.026</td>
<td>0.724</td>
</tr>
<tr>
<td>Constant</td>
<td>0.904**</td>
<td>0.080</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Model Chi-square = 24.211 0.000**  
Pseudo R² = 0.021

*p < 0.05, **p < 0.01, n = 892

Situational Level Model

Table 4.2 displays the regression estimates of the situational level correlates on the number of formal authority scale actions taken in police-citizen encounters. Six of the situational level correlates are significantly related to the dependent variable. Together, the situational level correlates explain 34 percent of the variance in the dependent variable.

More specifically, as the seriousness of a citizen’s criminal conduct increases so does the likelihood that the number of FAS actions taken will increase (b = 0.162; p < 0.000). CPD officers are more likely to use more FAS actions against citizens engaged in serious criminal conduct than they are against citizens engaged in less serious or no criminal wrongdoing. Another legal variable, the quantity of evidence, is positively related to the dependent variable. As the quantity of evidence available increases, the number of FAS actions is more likely to increase (b = 0.089; p < 0.000). Officers take more formal authority scale actions against citizens when they have evidence (particularly multiple forms of evidence) of citizen misconduct.
Table 4.2 – Situational Level Correlates of the Use of Formal Authority Scale Actions

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>se</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offense Seriousness</td>
<td>0.162**</td>
<td>0.039</td>
<td>0.000</td>
</tr>
<tr>
<td>Quantity of Evidence</td>
<td>0.089**</td>
<td>0.023</td>
<td>0.000</td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>0.019</td>
<td>0.058</td>
<td>0.736</td>
</tr>
<tr>
<td>Demeanor</td>
<td>0.150*</td>
<td>0.070</td>
<td>0.031</td>
</tr>
<tr>
<td>Citizen Intoxication</td>
<td>0.224**</td>
<td>0.070</td>
<td>0.001</td>
</tr>
<tr>
<td>Citizen Suspect</td>
<td>0.189**</td>
<td>0.062</td>
<td>0.002</td>
</tr>
<tr>
<td>Citizen Criminal Record</td>
<td>0.392**</td>
<td>0.053</td>
<td>0.000</td>
</tr>
<tr>
<td>Citizen Race</td>
<td>0.057</td>
<td>0.047</td>
<td>0.233</td>
</tr>
<tr>
<td>Citizen Gender</td>
<td>0.057</td>
<td>0.050</td>
<td>0.257</td>
</tr>
<tr>
<td>Citizen Age</td>
<td>0.028</td>
<td>0.064</td>
<td>0.661</td>
</tr>
<tr>
<td>Citizen Residency</td>
<td>0.008</td>
<td>0.048</td>
<td>0.871</td>
</tr>
<tr>
<td>Citizen Bystanders</td>
<td>-0.003</td>
<td>0.003</td>
<td>0.346</td>
</tr>
<tr>
<td>Constant</td>
<td>0.315**</td>
<td>0.056</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Model Chi-square = 318.520
Pseudo R$^2$ = 0.342

* $p < 0.05$, ** $p < 0.01$, n = 892

Extralegal factors also appear to influence the quantity of formal authority used in police-citizen encounters. When officers encounter citizens who are not deferential toward them, the number of FAS actions used against the citizen is more likely to increase (b = 0.150; p < 0.031). Citizens who showed signs of being intoxicated were more likely to experience more FAS actions than non-intoxicated citizens were (b = 0.224; p < 0.001). In addition, officers use more formal authority against citizens who are believed to be criminal suspects or involved in some other type of wrongdoing (b = 0.189; p < 0.002), and against citizens who have had prior involvement with the criminal justice system (b = 0.392; p < 0.000).

Community Level Model

Table 4.3 displays the Poisson regression estimates for the community level correlates on the number of formal authority scale actions taken in police-citizen encounters. Only one of the community level correlates, the neighborhood crime rate, is significantly related to the number of FAS actions. The level of crime in a community has a negative relationship with the number of
FAS actions officers used in police-citizen encounters (b = -0.700; p < 0.036). In other words, when the community crime rate is low, the police exercise more formal authority than they do in communities where the level of crime is high or higher. The R-square for the model indicates that the community level correlates explain a very limited amount, approximately 0.7 percent, of the variance in the number of FAS actions taken in police-citizen encounters.

Table 4.3 – Community Level Correlates of the Use of Formal Authority Scale Actions

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>se</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Rate</td>
<td>-0.700*</td>
<td>0.334</td>
<td>0.036</td>
</tr>
<tr>
<td>Residential Mobility</td>
<td>-0.133</td>
<td>0.249</td>
<td>0.593</td>
</tr>
<tr>
<td>SES Distress</td>
<td>0.041</td>
<td>0.052</td>
<td>0.428</td>
</tr>
<tr>
<td>Constant</td>
<td>0.916**</td>
<td>0.133</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Model Chi-square = 6.497
Pseudo R² = 0.007

*p < 0.05, **p < 0.01, n = 892

**Total Model**

The previous sections examined the influence of individual, situational and community level correlates on officer use of formal authority in police-citizen encounters. The impact of correlates at these three levels on officer use of formal authority scale actions varied greatly. When they are examined without correlates from the other two levels, the community level correlates explain less than one percent of the variance in the dependent variable. The model containing only individual level correlates explains two percent of the variance in the dependent variable. Unlike the limited explanatory power of the community level and the individual level models, the situational level model explains 34 percent of the variance in the quantity of formal authority used in police-citizen encounters. These analyses, however, did not simultaneously control for the impact of the correlates across all three levels of predictors.

The following is an analysis of the impact of correlates from all three levels on the number of FAS actions used in encounters with citizens. The outcome variable in this
dissertation has not been used in the extant research on officer behavior towards citizens. Therefore, this research should be considered exploratory in nature. As previously mentioned, several variables were excluded due to concerns over multicollinearity. In addition, several predictors were excluded based on the results of the previously discussed analyses of correlates at the three different levels. These predictors were insignificant in these prior models (i.e., officer type, officer education, citizen residency). Some variable that were insignificant were included as controls.

Seventeen predictors are used in the final model, and seven variables are significantly related to the dependent variable (see Table 4.4). The only variable that was significant in the prior analyses that does not remain significant in the total model is the community crime rate. The total model explains 36 percent of the variance in the quantity of formal authority used in police-citizen encounters, indicating only a small improvement in the fit of the model over the situational level model (34%).

Officers with fewer years of service are more likely to use more FAS actions against citizens than officers with more experience do (b = -0.012; p < 0.002). As the seriousness of a citizen’s conduct increases the quantity of formal authority used is more likely to increase (b = 0.152; p < 0.000). Likewise, as the quantity of evidence against a citizen increases the number of FAS actions used against them is more likely to increase (b = 0.082; p < 0.000). Even when criminal behavior in the presence of an officer is controlled, citizen demeanor is a significant predictor of the number of FAS actions taken. More FAS actions are likely to be taken against citizens who are not deferential to the police than citizens who are deferential (b = 0.157; p < 0.024). Officers are more likely to use fewer FAS actions against sober citizens than they do against citizens who show signs of intoxication (b = 0.237; p < 0.001). When an officer views a
citizen as criminal suspect or as a suspect in some other form of wrongdoing, the number of formal authority actions used is more likely to increase \( (b = 0.193; p < 0.001) \).

**Table 4.4 – Correlates of the Use of Formal Authority Scale Actions**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>se</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer Sex</td>
<td>0.020</td>
<td>0.066</td>
<td>0.762</td>
</tr>
<tr>
<td>Officer Race</td>
<td>-0.048</td>
<td>0.049</td>
<td>0.334</td>
</tr>
<tr>
<td>Officer Length of Service</td>
<td>-0.012**</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>Offense Seriousness</td>
<td>0.152**</td>
<td>0.040</td>
<td>0.000</td>
</tr>
<tr>
<td>Quantity of Evidence</td>
<td>0.082**</td>
<td>0.024</td>
<td>0.000</td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>0.033</td>
<td>0.058</td>
<td>0.568</td>
</tr>
<tr>
<td>Demeanor</td>
<td>0.157*</td>
<td>0.070</td>
<td>0.024</td>
</tr>
<tr>
<td>Citizen Intoxication</td>
<td>0.237**</td>
<td>0.071</td>
<td>0.001</td>
</tr>
<tr>
<td>Citizen Suspect</td>
<td>0.193**</td>
<td>0.061</td>
<td>0.001</td>
</tr>
<tr>
<td>Citizen Criminal Record</td>
<td>0.384**</td>
<td>0.053</td>
<td>0.000</td>
</tr>
<tr>
<td>Citizen Race</td>
<td>0.065</td>
<td>0.051</td>
<td>0.203</td>
</tr>
<tr>
<td>Citizen Gender</td>
<td>0.052</td>
<td>0.050</td>
<td>0.301</td>
</tr>
<tr>
<td>Citizen Age</td>
<td>0.052</td>
<td>0.065</td>
<td>0.427</td>
</tr>
<tr>
<td>Citizen Bystanders</td>
<td>-0.003</td>
<td>0.003</td>
<td>0.275</td>
</tr>
<tr>
<td>Crime Rate</td>
<td>-0.631</td>
<td>0.345</td>
<td>0.068</td>
</tr>
<tr>
<td>Residential Mobility</td>
<td>-0.212</td>
<td>0.249</td>
<td>0.394</td>
</tr>
<tr>
<td>SES Distress</td>
<td>-0.063</td>
<td>0.057</td>
<td>0.264</td>
</tr>
<tr>
<td>Constant</td>
<td>0.659**</td>
<td>0.146</td>
<td>0.000</td>
</tr>
<tr>
<td>Model Chi-square = 335.096</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R^2</td>
<td>0.000**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, n = 892

Although citizen race is not significant in the model displayed in Table 4.4, citizen race was significant (at the p < 0.05 level) in models without citizen criminal record included as a control variable. Specifically, in these models, more FAS actions are used against nonwhite citizens. In other words, the quantity of formal authority used against white and nonwhite citizens is statistically different within these data (blacks experience more formal authority than whites do), until a citizen’s criminal record is taken into account. When the police find that a citizen has a criminal record they are more likely to use more FAS actions against the citizen (b
= 0.384; p < 0.000), and when criminal history is controlled citizen race is statistically insignificant (b = 0.065; p < 0.203).

CHAPTER SUMMARY

This chapter examined the individual, situational and community level correlates of the quantity of formal authority police use in their encounters with citizens. The methods of analyses and the reasons for analytical technique used, Poisson regression modeling (PRM) were discussed. Models were estimated at each level of correlates, followed by a final model that regressed correlates from all three levels on the outcome measure.
CHAPTER 5: DISCUSSION AND CONCLUSION

The purpose of this study was to determine how individual, situational and community level correlates commonly used in policing research influence the quantity of formal authority used in police-citizen encounters. This chapter discusses the results of the analyses as they relate to the research questions. The policy implications of this research, along with suggestions for future research, are also discussed.

DISCUSSION OF THE ANALYSES

The preceding attempted to analyze the effects of predictors from three different levels on officer use of formal authority scale (FAS) actions. Overall, the results of these analyses are consistent with the extant research on formal authority as it is measured through other outcomes (i.e., arrest, citation, order maintenance, etc.). The results will be discussed at each level of correlates (individual, situational and community) and in context of the research questions.

Individual Level Correlates

The negative relationship between officer length of service and the quantity of formal authority exercised is significant in the individual level model and the total model. Furthermore, it is consistent with previous research that finds that more experienced officers use less formal authority than their less experienced counterparts do (Forst, et al., 1977; Worden, 1989). These results lend support to notions that an officer’s level of activity decreases over time (Niederhoffer, 1967), and that through their years of experience officers may have learned ways to address citizen behavior without taking formal actions (i.e., making arrests, issuing citations, filing reports) (Mastrofski, et al., 1996).

The first research question sought an answer to the following: “Do individual level correlates influence the quantity of formal authority scale actions used in police-citizen
encounters?"  With the exception of an officer’s length of service, officer characteristics exhibited no statistically significant influence on the use of formal authority scale actions against citizens.  This is consistent with the extant research on individual level correlates of police decision making (Sherman, 1980; Riksheim and Chermak, 1993; Brooks, 1999).  Indeed, the model estimating the effects of individual level characteristics explains only two percent of the variance in the use of formal authority scale actions.  Taken as a whole, the results indicate that individual level correlates do not influence the quantity of formal authority actions used by officers when they encounter citizens.

**Situational Level Correlates**

The results of these analyses make it more difficult to assess the second research question, “Do situational level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?”  If the answer to this question were based strictly on the effects of extralegal factors like a citizen’s age, gender and race, the answer would be that situational level correlates do not significantly influence the quantity of formal authority actions.  Indeed, many of the extralegal factors explored in these analyses are not statistically significant.  However, several of the situational level correlates, in particular the legal variables, are significantly related to the quantity of formal authority scale (FAS) actions used in interactions with citizens.  The situational level predictors explain 34 percent of the variance in the number of FAS actions used.  Furthermore, in the total model, six of the seven statistically significant predictors are situational level correlates.  It appears that situational level correlates do exert significant influence on the quantity of formal authority actions used by police officers against citizens.
In the extant research on officer use of formal authority, the legal severity of a citizen’s conduct is perhaps the most consistent predictor of officer behavior (Black and Reiss, 1970; Black, 1971; Lundman, 1974; Friedrich, 1977; Moyer, 1981; Smith and Visher, 1981; Smith and Klein, 1983; Smith, 1984; Smith, Visher and Davidson, 1984; Sykes, Fox and Clark, 1985; Worden, 1989; Lundman, 1994; Lundman, 1996a; Lundman, 1996b). The findings from these analyses are consistent with this literature. Offense severity is a significant and positive predictor of the quantity of formal authority scale actions used in police-citizen encounters. The number of FAS actions taken is more likely to increase when citizens are involved in criminal conduct (as opposed to those who have committed no crime) and when they are involved in serious offenses.

These analyses support prior research findings on the positive relationship between the level of available evidence and the use of formal authority (Black and Reiss, 1970; Black 1971; Friedrich 1977; Klinger, 1994.) As the quantity of evidence increases, the number of FAS actions used is more likely to increase, even when community and individual level correlates are controlled. This is consistent with research done in the “era of community policing” on the influence of evidence on the use of formal authority measured through arrest outcomes (Mastrofski, et al., 1995; Novak, et al., 2002). In the context of this research the police are likely to take an increasing number of FAS actions (they are more likely to use their formal authority), when there is evidence of citizen misconduct.

Although they are not legal variables, two important (and statistically significant) control variables were included in the analyses: (1) whether the citizen was ever considered a suspect and (2) whether the citizen had a criminal record. Officers take more formal authority scale actions against citizens they suspect of wrongdoing, and they utilize more FAS actions against
citizens who have criminal records, than they do against non-suspects or those without a record of criminal activity (Black, 1976; Myers, 1980; Avakame, et al., 1999). Both of these variables are important to understanding the quantity of formal authority scale actions used in police-citizen encounters.

It makes sense that officers would take more actions against suspects. If nothing else, officers would be more likely to engage in information gathering, discuss the reason for the encounter, threaten or impose a course of action, perform background checks, and/or conduct searches when they interact with citizens they suspect are engaged in wrongdoing (Skolnick, 1966; Black, 1976). These activities help the officer determine what needs to be done about a citizen or the citizen’s conduct. The outcome measure used in this dissertation was created to account for such activities.

Discovery of a criminal record was included as another measure of citizen status in the eyes of the officer. Arguably, citizens who possess criminal records are less respectable in the eyes of the law; possession of a criminal record makes a citizen a suspect and worthy of more scrutiny (Black, 1976; Myers, 1980; Avakame, et al., 1999). As previously discussed, in the unreported exploratory models citizen race was a significant predictor of the number of FAS actions taken when criminal record was not included as a control. Specifically, those models indicated that the number of FAS actions used in an encounter was more likely to increase when the citizen was black, which suggests that blacks experience more coercive control than whites do. Once the status of a citizen’s criminal history is introduced into the analyses, citizen race no longer influences the quantity of formal authority exercised. In other words, the quantity of formal authority exercised, the number of FAS actions used against a citizen, is influenced by a
citizen’s status as an ex-offender (as measured by the discovery of a criminal record), not the citizen’s race.

This examination of situational level correlates on officer behavior also supports the research that addresses Klinger’s (1994; 1996b) critique of previous analyses that look at citizen demeanor. Even when citizen behavior in the presence of the officer (specifically criminal behavior) is controlled, the police are more likely to take coercive action against an antagonistic or hostile citizen than a citizen who is deferential (Mastrofski, et al., 1995; Worden, et al., 1996; Engel, et al., 2000; Novak, et al., 2002). The number of FAS actions against citizens who are not deferential is likely to increase when compared to citizens who show deference. Interestingly, the control variable “in-presence crime” is insignificant in the analysis presented and it was not significant in any of the unreported models that were explored.

Citizens showing signs of intoxication experience more formal authority than citizens who are, or appear to be, sober. The results are consistent with the research that finds that officers are more likely to exercise formal authority, such as making arrests, against intoxicated citizens (Smith, 1987; Mastrofski, et al., 1995; Novak, et al., 2002). The number of formal authority actions taken is more likely to increase when officers encounter visibly inebriated citizens, or when they detect that a citizen is intoxicated, than when they encounter sober citizens.

**Community Level Correlates**

Together, the crime rate, residential mobility and the socioeconomic distress measures explain less than one percent (0.7%) of the variance in the number of formal authority scale actions used. In the community level model, residential mobility and the measure for socioeconomic distress do not influence the quantity of formal authority exercised by officers.
The crime rate is significantly related to the number of FAS actions used in the community level model, but the relationship is not in the expected direction.

It is expected that if the crime rate has any influence on how officers engage in coercive control, it would be a positive relationship: officers are more likely to use their formal authority, and use more of it, in areas with high or higher levels of crime (Crank, 1990; Miller and Bryant, 1993; Smith, 1986; Sampson, 1986; Klinger, 1997). According to the results, however, the number of FAS actions taken is more likely to increase when the encounter occurs in a low-crime area. In other words, the number of FAS actions is not likely to increase when officers confront citizens in neighborhoods that have high levels of crime. One interpretation of this finding is that officers are more likely to investigate suspicious behavior and sanction criminal conduct in areas with low levels of crime in order to keep crime and disorder from becoming larger problems. In neighborhoods where the crime rate is low, the “tolerance threshold” for criminal conduct or suspicious behavior may also be low, resulting in police use of higher quantities of formal authority against citizens (Klinger, 1997; Mastrofski, et al., 2000).

Nevertheless, when they are introduced in the total model the community level correlates have no impact on the number of FAS actions used in police citizen encounters. This was the case in all of the unreported exploratory models as well. The third research question asked, “Do community level correlates influence the quantity of formal authority scale actions used in police-citizen encounters?” The results from the analyses of community level correlates suggest that when it comes to the quantity of formal authority scale actions used in police-citizen encounters, officers are not influenced by community level predictors.
Summary of Findings

In summary, based on the results from the total model, the following correlates are significantly related to the number of formal authority scale actions used in police-citizen encounters:

- **Officer Length of Service**—the number of formal authority scale actions used is more likely to decrease as officer length of service increases.
- **Offense Seriousness**—as the seriousness of a citizen’s criminal conduct increases the number of formal authority scale actions used is more likely to increase.
- **Quantity of Evidence**—as the quantity of evidence available to an officer increases the likelihood that more formal authority scale actions will be used increases.
- **Citizen Demeanor**—when citizens are not deferential the likelihood that officers will use more formal authority scale actions increases.
- **Citizen Intoxication**—the number of formal authority scale actions used is more likely to increase when police encounter intoxicated citizens or citizens who appear to be intoxicated.
- **Considered Suspect**—the number of formal authority scale actions used against a citizen is more likely to increase when an officer considers the citizen a suspect in a criminal matter or some other form of wrongdoing.
- **Criminal Record**—the number of formal authority scale actions used against a citizen is more likely to increase when it is found that a citizen has a prior criminal record.

POLICY IMPLICATIONS

The findings from this dissertation are relevant to policing in several ways. The analyses involving individual level correlates suggest that officer characteristics do not influence how formal authority is exercised in police-citizen encounters. These findings could assist policy makers with regard to the recruitment, selection and training of officers.

The findings from this dissertation suggest that officer use of formal authority against citizens is not influenced by officer gender, race or ethnicity. Furthermore, officer level of
education has no effect on the quantity of formal authority exercised against citizens. Increasing the level of education and racial, ethnic and gender diversity among officers has been a goal of many police departments. While these attributes may be considered important to police work, an officer’s level of experience appears to be a more important factor in how officers interact with citizens. Attempts to change officer use of formal authority (how coercive officers are) by changing who becomes an officer may alone be ineffective. If policy makers and police administrators are concerned with how officers use their formal authority against citizens and want to address the matter, these findings suggest that the point of focus should be on the training process and level of supervision for new officers and officers with fewer years of experience.

Policy makers and administrators may want to utilize research that focuses on nonarrest outcome measures in order to gain a more complete picture of how officers exercise their formal authority with citizens. Prior research has shown that arrest is a rare event. It is clear from the correlates examined that the situational exigencies of an encounter influence officer behavior. Officers take more formal authority scale actions against people who are engaged in illegal or questionable conduct, particularly when they have evidence of misconduct. While it is understandable that officers use more of their authority when there is legal ground to stand on, the results of this study suggest that officers are also more likely to use more of their powers against citizens who have not necessarily violated any laws. While this may be a part of the reality of policing, that police action in the absence of legal authority occurs (i.e., order maintenance) and is sometimes necessary, such actions do not always facilitate positive relations between the police and the public, particularly among those who are not offenders.
When citizens are non-deferential or hostile to officers, the quantity of formal authority exercised is more likely to increase. In addition, the degree of social control exercised against citizens who have criminal records is more likely to be higher than the level of control exercised against “respectable” citizens (Black, 1976; Myers, 1980; Avakame, et al., 1999). Under community and problem-solving policing, officers are encouraged to be more proactive in addressing citizen behavior, and to address problems or signs of problems before they turn into bigger issues. Compared to a strict law enforcement model or approach, this may mean using more social control than normal against citizens who have not broken the law, or taking actions against citizens for conduct that would otherwise be ignored by the police. Regardless of their crime control benefits, encounters related to law enforcement and order maintenance activities often leave citizens with a sense of frustration and abuse, particularly when citizens perceive that they have not broken any laws (Greene, 2000). The findings from these analyses suggest that officer use of formal authority scale actions is influenced by extralegal factors and citizens may experience degrees of social control for reasons that they do not understand, see validity in, or agree with. Citizen perceptions and complaints of overly coercive or “heavy-handed” policing may be supported through an examination of the use of formal authority that is less than arrest (Browning, et al., 1994). The findings from this research and future studies that examine nonarrest outcomes may reveal behaviors that require more training for officers and accountability mechanisms that are capable of addressing these issues.

FUTURE RESEARCH

Future research should be done that concentrates on at least three primary areas: refinement of outcome measures and operationalization of correlates, organizational variation
and utilization of aggregate level correlates from smaller geographic units. First, this study was
done in part to address the limited number of studies utilizing non-dichotomous outcome
measures, in particular the no arrest/arrest outcome measure, in police-citizen encounters. Future
research on officer behavior in such encounters should continue to explore outcomes that are less
than arrest, and they should continue to explore ways to quantify formal authority beyond the
most serious action taken against citizens (Black, 1980; Klinger, 1996a).

Future studies that seek to utilize a formal authority scale to rank police actions and/or
quantify formal authority could explore changes in the composition or the scale and the ranking
of scale categories. Researchers may also explore scales that are more parsimonious by using
fewer FAS categories or collapsing categories together (like suggested actions and threatened
actions). Future research should explore the commonly used correlates in research on officer
behavior toward citizens and correlates that may be more relevant to FAS-like outcome
measures. In addition, future research may explore the temporal order of FAS actions taken, as it
is possible that one action on the scale may elicit use of other FAS actions, which could
influence the total amount of formal authority exercised (Sykes and Brent, 1980; Sykes and
Brent, 1983). Unfortunately, the present data set did not allow for this type of analysis.

Another issue that should be addressed by future research in this area is the influence of
organizations on officer use of formal authority. A clear limitation of this study is the fact the
data were collected from one police department, which limits the ability to assess the impact of
organizational factors on individual officer use of formal authority. Police organizations vary in
size, and it has been suggested that they may vary in their operational style (Wilson, 1968;
Langworthy, 1985). Most of the research in policing utilizes data collected from large police
agencies, and there is a dearth of research on small police organizations and the behavior of
officers working in such environments (Weisheit et al., 1999). Consequently, policing research and theory are biased by large, big city agencies (Walker, 1999).

Third, aggregate level correlates from smaller geographic areas should be considered by future research. Although the analyses in this dissertation found that community level correlates have little to no influence on officer use of formal authority, future research should explore such factors at the census tract or block level. Police behavior may be influenced by the characteristics of a particular community or neighborhood, but they may also be influenced by very small areas like a particular block or street corner. Crime and criminal activity can be focused in particular areas within communities (i.e., “hot spots”), and police-citizen encounters that occur in high crime places (not just high crime neighborhoods) may be influenced by the unique characteristics of the location (Sherman et al., 1989; Sherman, 1995). Disaggregating community level correlate down to the census tract or block level may provide information on whether such “hot spots” or specific locations influence officer use of formal authority.
REFERENCES


Cincinnati Police Division Position Classification. 1998. Community Policing (COP) Neighborhood Officer, Cincinnati, OH.

Cincinnati Police Division Position Classification. 1998. Uniform Patrol Officer, Police Officer / Specialist, Cincinnati, OH.


Horney, J. 1980. “Citation Arrest: Extending the Reach of the Criminal Justice System?” Criminology 17: 419-434.


Appendix I
Ride Instrument
1. Enter the five digit Ride number?

2. Enter your observer ID code?

3. Enter date ride began?

4. Official start time of observed officer's shift? (Military)

5. Did your observation of the assigned officer begin later than the official beginning time of this shift?
   1. no [GO TO Q-7]
   2. yes

6. Why did your observation of the assigned officer begin late?
   1. observer was not present when officer started work
   2. observer was reassigned to this officer because of split shift
   3. officer not present; on duty elsewhere (include in the building)
   4. officer not present; on personal business elsewhere
   5. officer not present; don't know what he/she was doing
   6. other

7. What was the official end time of assigned officer's shift? (Military)

8. Did your observation of the assigned officer end earlier than the official ending time of this shift?
   1. no [GO TO Q-10]
   2. yes

9. Why did your observation of the assigned officer end early?
   1. observer requested it for personal reasons
   2. officer had other official duties requiring transfer to other unit serving the assigned beat
   3. officer had permission to leave early for pers. business
   4. officer left early for personal business w/o permission
   5. officer left work early for personal business and status of permission unknown
   6. officer left work early for reasons unknown
   7. other

10. To what type of unit was the observed officer(s) assigned?
   1. beat officer
   2. community policing officer (SKIP TO QUESTION 12)
   3. other specialist

11. In what beat were you assigned to ride director?

12. Primarily, what neighborhood was the COP officer assigned?

13. O1's ID number? (USE OFFICER BADGE NUMBER - SEE CODE SHEETS)

14. How long has O1 been regularly assigned to this beat/area of responsibility?

   ENTER TIME--IN MONTHS.
15. How many years of education of 01?
1. Less than HS
2. HS grad
3. Some college or trade school
4. College graduate
5. Some post graduate education
6. Advanced degree

15b. Officer O1's sex
1. Male
2. Female

15c. Officer O1's race:
1. White
2. Black
3. Hispanic
4. Asian
5. Other or mixed race

16. Age of 01? (YEARS)

17. Length of service with CPD? (YEARS)

18. Marital status of 01?
1. Single, never married
2. Married
3. Divorced or seperated
4. Widowed
5. Refused

19. At the beginning of the ride (first 1/2 hour), what was O1's attitude about having an observer present?
1. very negative
2. negative
3. neutral
4. positive
5. very positive

20. At the end of the ride (last half hour), what was O1’s attitude about having an observer present?
1. very negative
2. negative
3. neutral
4. positive
5. very positive

21. O2's ID number? (USE OFFICER BADGE NUMBER - SEE CODE SHEETS)

IF THERE IS NO O2, ENTER ZERO. [GO TO Q-29]

22. How long has O2 been regularly assigned to this beat/area of responsibility? (MONTHS)

23. How many years of education of O2?
<table>
<thead>
<tr>
<th></th>
<th>Less than HS</th>
<th>HS grad</th>
<th>Some college or trade school</th>
<th>College graduate</th>
<th>Some post graduate education</th>
<th>Advanced degree</th>
</tr>
</thead>
</table>


25. Length of service with CPD? (YEARS)

25b. Officer O2's sex

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>

25c. Officer O2's race:

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Asian</th>
<th>Other or mixed race</th>
</tr>
</thead>
</table>

26. Marital status of O2?

<table>
<thead>
<tr>
<th></th>
<th>Single, never married</th>
<th>Married</th>
<th>Divorced or separate</th>
<th>Widowed</th>
<th>Refused</th>
</tr>
</thead>
</table>

27. At the beginning of the ride (first 1/2 hour), what was O2's attitude about having an observer present?

<table>
<thead>
<tr>
<th></th>
<th>very negative</th>
<th>negative</th>
<th>neutral</th>
<th>positive</th>
<th>very positive</th>
</tr>
</thead>
</table>

28. At the end of the ride (last half hour), what was O2's attitude about having an observer present?

<table>
<thead>
<tr>
<th></th>
<th>very negative</th>
<th>negative</th>
<th>neutral</th>
<th>positive</th>
<th>very positive</th>
</tr>
</thead>
</table>

29. Was there precipitation during this ride?

|   | no | light rain | heavy rain | combination of 2 and 3 | light snow/sleet/hail | heavy snow/sleet/hail | combination of 5 and 6 |
30. What was the average temperature during the ride?

31. Did the weather, in your opinion, affect how the officer(s) acted or conducted their shift?
   1. No
   2. Yes - it diminished their activity (explain in the narrative)
   3. Yes - it increased their activity (explain in the narrative)

32. Did this ride take place on the date as assigned?
   1. yes
   2. no, officer was sick on assigned ride date
   3. no, observer was sick on assigned ride date
   4. no, officer was on a scheduled day off
   5. no, officer was on vacation
   6. no, no officer available on assigned day for assigned beat
   7. no, other reason (observer did not go, etc.)
Appendix II
Problem Codes
PROBLEM CODES

Problems with Persons

005 MEET COMPLAINANT -- Code when this is all the information that is given (e.g., "See a man, woman, person at..." or "I need the police at x location").

010 PUBLIC NUISANCE -- Any person(s) or circumstances alleged to be annoying, unpleasant, or obnoxious to an individual or the public welfare (e.g., general complaint about rowdy party, firecrackers, peace disturbance). Whenever possible, use more specific codes below.

011 DRUNK -- Person is inebriated or alleged to be inebriated.

012 DISORDERLY -- Person is excessively loud, rowdy, annoying to others or is alleged to be disorderly by a citizen or officer.

013 VAGRANCY -- No visible means of support. Do not use code 013 when Drunk; use code 011.

014 LOITERING -- Person(s) lingering in public place (e.g., youths hanging out on corner). Appropriate for encounter that begins with police officer saying "move along."

015 PORNOGRAPHY -- Sale, distribution, or consumption of illegal sexual-related literature, film, etc.

016 OBSCENE ACTIVITY -- Lewd, unchaste, indecent activity (e.g., indecent exposure, Peeping Tom). Do not code 016 when Pornography (015) or Prostitution (023).

017 NOISE DISTURBANCE -- Use when someone complains about or officer investigates a loud party or gathering where they have been disturbed by the excessive noise. (E.g., "That barking dog next door keeps me from getting my sleep." "They're playing their stereo for the whole neighborhood.")

018 PEDDLING, BEGGING -- A person selling pencils or other wares on the street without a permit or begging for money.

019 ARGUMENT, PARTICIPANTS UNSPECIFIED -- Any verbal disagreement that stops short of physical contact with persons or property where type of participants is unknown.

020 DOMESTIC ARGUMENT -- Any verbal disagreement between related family members (including couples "living together") that stops short of violent physical contact with persons or property.

021 NON-DOMESTIC ARGUMENT -- Any verbal disagreement between non-related individuals that stops short of violent physical contact with persons or property.

022 GAMBLING -- Any of a number of illegal gambling activities (e.g., book making, numbers, dice, etc.).

023 PROSTITUTION/SOLICITING -- Sexual relations for pay (e.g., street walkers, call girls, illegal massage parlors). Include soliciting sex for money, whether by seller or buyer of sexual services.

024 CURFEW VIOLATION OR TRUANCY -- Juveniles or adults out after designated hours or a pupil who stays away from school

025 KEEP THE PEACE - PREVENT POTENTIAL ARGUMENT -- Use this code, for example, when a woman requests police protection while picking up her clothes from her house in a situation where she is leaving her husband. The officer is requested to be present so as to prevent any problem from developing.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>026</td>
<td>JUVENILE PROBLEM/DISTURBANCE (Non-specific) -- Use this code for a complaint about juveniles that does not otherwise fit one of our other categories. E.g., &quot;the boys are playing in the street again.&quot; “Those kids keep tormenting my dog.”</td>
</tr>
<tr>
<td>027</td>
<td>HARASSMENT/STALKING -- Conduct directed toward a victim that includes repeated or continuing impermissible contact that would cause a reasonable person to suffer emotional distress and that actually causes the victim to suffer emotional distress.</td>
</tr>
<tr>
<td>028</td>
<td>FAMILY TROUBLE (unspecified) -- Use this code for a report of &quot;family trouble&quot; where the nature of the trouble is unspecified (We've got a family trouble at 12th and Walnut”). Do not use this code when a more specific one applies (i.e., 029, Domestic Argument, 093, Domestic Fight, etc.).</td>
</tr>
<tr>
<td>030</td>
<td>INTER-GROUP CONFLICT -- Conflicts between groups of citizens, where group membership extends beyond family ties, such as neighborhood associations, clubs, gangs, or just many unrelated people who have a dispute with another group of unrelated people. Do not use this code when conflict involves fights, assaults, or other specific physical contact in the encounter.</td>
</tr>
<tr>
<td>031</td>
<td>NEIGHBOR TROUBLE -- Use this code for a report of &quot;neighbor trouble where the nature of the problem is otherwise unspecified.</td>
</tr>
<tr>
<td>032</td>
<td>GANG CONFLICT -- Use this code for a report of conflict between gangs, where the nature of the conflict is otherwise unspecified.</td>
</tr>
<tr>
<td>033</td>
<td>LABOR - MANAGEMENT PROBLEMS -- Conflict between labor and management in a business or government agency.</td>
</tr>
<tr>
<td>035</td>
<td>GANG PROBLEM, GENERAL -- Use this code when the problem is identified as a “gang problem,” but there is no specific conflict or fight involved.</td>
</tr>
<tr>
<td>040</td>
<td>DRUG VIOLATIONS -- Includes sale, consumption, or possession, of unspecified drugs.</td>
</tr>
<tr>
<td>041</td>
<td>ALCOHOL LAW VIOLATION -- Illegal possession, or consumption of alcohol (e.g., blue law violation, after hours, speakeasy, underage drinking). Do not code 041 is driving while intoxicated (471) or drunk (011).</td>
</tr>
<tr>
<td>042</td>
<td>ILlicit DRUGS (NONALCOHOL), GENERAL -- Includes any nonalcoholic illicit drugs, when the precise nature of the drugs are unknown or there are multiple types of drugs.</td>
</tr>
<tr>
<td>043</td>
<td>MARIJUANA -- Includes consumption possession, dealing of marijuana/hasish.</td>
</tr>
<tr>
<td>044</td>
<td>COCAINE/CRACK -- Includes possession, consumption, dealing of cocaine or crack.</td>
</tr>
<tr>
<td>045</td>
<td>OTHER NARCOTIC/ILlicit DRUGS -- Includes possession, consumption, dealing of any other narcotic/illicit drug or look-alike substance that is not included in codes 043 and 044 above.</td>
</tr>
<tr>
<td>046</td>
<td>PARAPHERNALIA -- Includes possession, use, or dealing in illicit drug paraphernalia.</td>
</tr>
<tr>
<td>050</td>
<td>CROWD CONTROL -- Control of large groups of citizens gathered in public or private spaces.</td>
</tr>
<tr>
<td>051</td>
<td>PARADES/PUBLIC EVENTS -- Use for control of officially sanctioned public events.</td>
</tr>
<tr>
<td>052</td>
<td>CIVIL DISORDERS (RIOTS, TERRORISM, PRISON DISORDERS) -- Violent, mass public disturbance, and the use of threats of force to intimidate or coerce.</td>
</tr>
<tr>
<td>060</td>
<td>FAMILY NEGLECT/NONSUPPORT -- Use when a general reference to neglect or non-support of family members.</td>
</tr>
</tbody>
</table>
061 CHILD NEGLECT -- Neglect, nonphysical abuse, or threat of for directed at a child by a member of the family (e.g., child abandonment, locking a child in a closet, not feeding a child, etc.). Do not code 061 where there is actual physical harm involved. Instead see codes 101-103.

062 NONPAYMENT OF SUPPORT -- Includes nonpayment of either child support or alimony payments.

063 CONTRIBUTING TO DELINQUENCY OF A MINOR

070 MISSING PERSON -- Report of a person as missing or the description of a person reported as missing. If person provides or requests additional request for or report of information, use the 600 code first 070 second.

071 JUVENILE RUNAWAY -- A call to report a juvenile runaway, by parent or guardian, or the discovery of a juvenile runaway. See above for use of 600 codes.

072 KIDNAP -- To carry or attempt to carry a person away by unlawful force or by fraud and against the person's will.

080 MEDICAL ASSISTANCE -- An unspecified call for some form of medical help.

081 "MAN DOWN" - CAUSE UNKNOWN -- A call that there is a person lying in a public place who may require some form of medical or emergency transport service. The person might be drunk, sick, dead, or anything else, but the call does not specify the cause.

082 EMERGENCY MEDICAL TRANSPORT NEEDED -- Use for the transport of medical personnel or medical case in emergency conditions (e.g., emergency warning signals, fast driving).

083 FIRST AID, RESUSCITATION NEEDED -- Use when the call indicates that the police will be expected to administer first aid or resuscitation and not just to transport someone.

084 OBSTETRIC -- Use for call related to emergency treatment of woman during pregnancy or childbirth.

085 MENTAL DISORDER, INVOLUNTARY HOSPITALIZATION -- Code anytime that problem is presented to the officer as someone who is mentally ill or acting irrationally. Include in this category the process of committing someone to a mental health facility that occurs in a non-emergency setting.

086 HELPING INVALID OR DISABLED PERSON -- Use for moving a sick or injured person from one room to another, helping an old or disabled person get back into bed if they've fallen out, etc. Do not use in emergency situations where 082, Emergency Medical Transport, or 083, 084, etc. apply.

090 PHYSICAL INJURY INFlicted BY PERSONS -- Use for a general reference to some physical harm inflicted by one person on another where information is not sufficient to code in one of the categories below.

091 THREATENED PHYSICAL INJURY -- Code when someone has threatened to harm someone else. (I'm gonna break your arm. I'm gonna beat you up.)

092 FIGHT (PHYSICAL) -- Any disagreement that includes violent physical contact with persons or property. Use codes in this category when there is not sufficient information to select a more specific category, such as simple or aggravated assault.

093 DOMESTIC FIGHT -- A disagreement that includes violent physical contact with persons or property between related family members (including couples "living together").

094 NON-DOMESTIC FIGHT -- A disagreement that includes violent physical contact with persons or property between unrelated individuals.

994 GANG FIGHT -- Use this code for a non-domestic fight involving gangs of youths or others. Do not use for all fights involving more than
two participants. Rather use 994 only when it is specified by the dispatcher, the citizen complainant, or someone else as definitely a gang fight

095 SIMPLE ASSAULT -- The physical attack by one person upon another not accompanied by the use of a weapon.

096 DOMESTIC ASSAULT -- The physical attack by one person upon another not accompanied by the use of a weapon when it is known that the participants are related family members (including couples living together).

097 NON-DOMESTIC ASSAULT - The physical attack by one person upon another not accompanied by the use of a weapon when it is known that the participants are not related family members.

098 AGGRAVATED ASSAULT - Physical attack by one person upon another accompanied by the use of a weapon or other means likely to produce death or serious bodily harm.

099 DOMESTIC AGGRAVATED ASSAULT - Code 099 when it is known that the aggravated assault is between related family members (including couples living together).

100 NON-DOMESTIC AGGRAVATED ASSAULT - Code 100 when it is known that the aggravated assault is not between related family members.

101 CHILD ABUSE, GENERAL -- Physical harm inflicted by a person on a child. See codes 60-63 for nonphysical abuse.

102 INCEST

103 NEGLECT RESULTING IN SERIOUS BODILY INJURY --

110 SUSPICIOUS PERSON -- A general claim belief that there is a suspicious person in a neighborhood or a police officer stopping someone because of suspicious dress or activity. (Use this category unless officer or caller indicates with specificity what is expected, e.g., a drunk, someone using illegal drugs, etc.). For calls, "Person w/a gun" should be coded 110.

111 PROWLER -- A report or officer-initiated action relating to an unidentified person in or near private property.

112 GUNSHOT -- A report that someone has heard a gunshot at a particular location.

113 SCREAMS -- A report that someone has heard screams at a particular location.

114 SUSPICIOUS CIRCUMSTANCES -- A situation that looks like a crime or other wrongdoing is in progress, might be in progress, or that the situation lends itself to crime/wrongdoing (e.g., open window, open door, unattended car that is running). This should be used for situations where there is no suspicious person that is the focus of police or citizen attention.

115 SUSPECTED VIOLATOR -- Use for general reference to a suspected violator without more specific information.

116 FLIGHT FROM POLICE/LAWFUL DETENTION -- Suspect or apparent violator in flight (e.g., parole violator, prison escapee, wanted for questioning, etc.). Do not code when person is fleeing from officer at start of event unless person fleeing is previously known to be wanted (e.g., burglar running away upon police arrival see code 117 for those situations).
117 INTERFERENCE WITH POLICE -- Through verbal or physical means an individual refuses to obey a command given by a police officer (e.g., refusing to stop when signalled or commanded by police, resisting arrest, harboring a fugitive). Do not use this code if refused to comply temporarily, but does comply after a verbal exchange.

118 WEAPONS VIOLATION -- The unlawful possession, sale, transfer, or discharge of a weapon (e.g., carrying a gun without a license, discharge of weapon in public place, possessing sawed-off shotgun or machine pistol, etc.). Does not apply to Bomb Threat, 332.

120 ROBBERY -- Use for a generalized reference to a robbery without any further information. Note: “robbery” includes CARJACKING.

121 ATTEMPTED ROBBERY

122 ROBBERY OF PRIVATE CITIZEN -- Theft directly from a person by force or threat of force. Robbery may or may not involve an actual physical attack. Threat of force is enough to place a theft from residence into this category. More force than is necessary to steal a purse must be applied to place Purse Snatch, 242 in this category.

123 ATTEMPTED ROBBERY OF PRIVATE CITIZEN

124 ROBBERY OF FINANCIAL INSTITUTION -- Theft from a financial institution accomplished by force or threat of force (e.g., hold up of check-cashing agency; bank robbery).

125 ATTEMPTED ROBBERY OF FINANCIAL INSTITUTION

126 ROBBERY OF OTHER COMMERCIAL ESTABLISHMENT -- Theft from a nonfinancial institution accomplished by force or threat of force. Robbery may or may not involve an actual physical attack. Threat of force is enough to place a theft from commercial establishment into this category (e.g., hold up of grocery store, shop, bar, service station, etc.).

127 ATTEMPTED ROBBERY OF OTHER COMMERCIAL ESTABLISHMENT

130 SEXUAL ATTACK -- Use when a generalized reference to some form of sexual attack without specific information.

131 ATTEMPTED SEXUAL ATTACK

132 RAPE -- The carnal knowledge of a female through the use of force or the threat of force or of a minor (e.g., statutory rape)

133 ATTEMPTED RAPE

134 CHILD MOLESTATION -- A sexual attack upon a child.

135 ATTEMPTED CHILD MOLESTATION

140 DEATH ("DEAD BODY") -- Request to respond to report on sighting of dead body or suspicion of dead body (e.g., "my husband passed on in his sleep."). Use this code when no other reason for death can be specified.

141 ACCIDENTAL DEATH -- Death by accident (e.g., drowning, industrial accident, but not traffic fatality which is 414).

142 SUICIDE -- Killing oneself intentionally.

143 ATTEMPTED SUICIDE
**HOMICIDE** -- Death of any person through the acts of another (but not traffic fatality which is 414).

**ATTEMPTED HOMICIDE**

**CIVIL RIGHTS VIOLATION** -- Denying an individual their constitutional or legal rights. Do not code when police officer does not inform individual of their rights.

**ADULT SUBJECT OF POLICE CONCERN** (non-specific) -- Use this code for cases where the police are concerned about an adult's welfare, but no specific problem type applies. E.g., "I'm going to check on the old couple who live in the back apartment, we try to look in on them every couple of days."

**JUVENILE SUBJECT OF POLICE CONCERN** (non-specific) -- Same as 160, except that the subject of concern is a juvenile.

**SCHOOL SAFETY** -- Problems relating to the safety of persons attending or working on school property.

### Problems with Property

**DISCOVERY OF MISSING OR STOLEN PROPERTY** -- Code for a request for response or for a response to call of located, missing, or stolen property, or when police officer discovers such property.

**ALARM (NOT FIRE)** -- Burglary, residence, bank, business. See Code 322 for fire alarm. Use this code when officers are responding to an alarm.

**ALARM (CHRONIC FALSE)** -- Use this code for any security alarm problem related to repeated false alarms.

**MISSING OR STOLEN PROPERTY** -- Use this code for an unspecified problem with property that does not fit any of the categories below.

**LOST PROPERTY** -- A report that someone has lost some form of property (e.g., a lost watch, a lost wallet, etc.).

**RETURN OF LOST PROPERTY** -- Code when police officer returns lost property or caller reports recovery/return of lost property.

**THREAT TO TAKE PROPERTY** -- Someone threatens to take away the property of another person.

**RETURN OF STOLEN PROPERTY** -- Code when police officer returns stolen property; or when caller reports return/recovery of stolen property.

**BUYING, RECEIVING, OR POSSESSING STOLEN PROPERTY** -- The knowledgeable (or alleged knowledge) purchase, receipt, or possession of stolen property.

**THEFT, UNSPECIFIED** -- Use for a generalized reference to stolen property.

**ATTEMPTED THEFT, UNSPECIFIED**

**MOTOR VEHICLE THEFT** -- Involves stealing or unauthorized (Without owner consent) removal of an automobile, motorcycle, snow mobile, motor boat, or other powered vehicle

**ATTEMPTED MOTOR VEHICLE THEFT**
THEFT FROM RESIDENCE -- The successful stealing of property from a residence where no indication of unlawful entry is present. It is the crime of stealth that leads only to the loss (or threatened loss) of property or cash within the confines of an individual's private dwelling unit or ancillary buildings such as a garage, shed, or barn.

ATTEMPTED THEFT FROM RESIDENCE

THEFT FROM COMMERCIAL -- The successful stealing of property from a commercial or industrial establishment where no indication of unlawful entry is present. This does not include Shoplifting, 238. For example, items may be taken from the area within a security fence or by a person remaining in the store after hours.

ATTEMPTED THEFT FROM COMMERCIAL

SHOPLIFTING -- The stealing of articles from within a commercial establishment during regular store hours.

ATTEMPTED SHOPLIFTING

THEFT FROM MOTOR VEHICLE -- The stealing of articles from a motor vehicle (e.g., stolen motor vehicle parts and accessories stolen audio equipment, etc.).

ATTEMPTED THEFT FROM MOTOR VEHICLE

PURSE SNATCHED/POCKET PICKED -- Theft of either purse or wallet where no more force than is necessary to remove the property from the individual is exhibited. If excessive force is used, code as Robbery of Private Citizen, 122.

ATTEMPTED PURSE SNATCH/POCKET PICKED

BURGLARY -- Use when a generalized reference to a burglary without specific information to use one of the more detailed codes listed below.

BURGLARY, RESIDENTIAL -- The successful theft that involves the unlawful entry of residence or related residential building such as a garage, shed, or barn. Thefts committed by persons that have a right to be in the property (e.g., personal guests and service workers) should be coded as Theft From Residence, 234. If an unsuccessful attempt, code as 282, Break-In, Residential.

BURGLARY, COMMERCIAL -- The successful theft that involves the unlawful entry of a commercial or industrial establishment (e.g., breaking into a store after closing or breaking through a security fence and taking items) - If an unsuccessful attempt, code as 284, Break-In, Commercial.

UNWANTED/UNAUTHORIZED ENTRY OR PRESENCE -- Use for general reference to an unwanted or unauthorized entry where specific information is not available to code one of the more detailed codes listed below.

TRESPASSING -- To non-forcibly enter private or restricted public area without permission or right.

TRESPASSING, RESIDENTIAL(PRIVATE) -- To non-forcibly enter one's private residential property without permission or right (e.g., riding or walking through a yard, a known individual [friend] walking into an unlocked house or ancillary building).

TRESPASSING, RESIDENTIAL(PUBLIC) -- Same as 272, but pertains to public housing.
TRESPASSING, COMMERCIAL -- To non-forcibly enter a commercial, industrial, or restricted public area without permission or right (e.g., railroad yard, jumping a fence around a school).

UNAUTHORIZED USE OF MOTOR VEHICLE -- Use this code when a car is used without the owner's permission, but is not considered stolen. E.g., "My Uncle took my car over to New Haven, Connecticut when I wasn't around. I want him to bring it back right now!"

BREAK-IN -- Use for a generalized reference to a break-in

ATTEMPTED BREAK-IN/INCLUDING ALARMS -- Use when cannot discern whether location is commercial or residential. Also use when location is public/governmental property such as school.

BREAK-IN, RESIDENTIAL -- The unlawful entry of a residence or related residential building where no property is removed from the premises.

ATTEMPTED BREAK-IN, RESIDENTIAL/INCLUDING ALARMS

BREAK-IN, COMMERCIAL -- The unlawful entry of a commercial premise or related commercial building where no property is removed from the premise. For this category entry will almost always be by force or stealth.

ATTEMPTED BREAK-IN, COMMERCIAL/INCLUDING ALARMS

BREAK-IN, MOTOR VEHICLE -- The unlawful entry of a motor vehicle such as a car, truck, or boat where no property is removed from the vehicle. This category will involve entry by force or stealth.

ATTEMPTED BREAK-IN, MOTOR VEHICLE/INCLUDING ALARMS

SUSPICIOUS PROPERTY CONDITION -- General request to respond to report or sighting of property condition (excluding motor vehicle) that "does not appear right."

PECULIAR OR PUZZLING CIRCUMSTANCE -- Request to respond to report, or sighting of extraordinary or supernatural circumstances (e.g., UFOs, unusual noise, or explosion, etc.).

SUSPICIOUS MOTOR VEHICLE -- Request to respond to report or sighting of motor vehicle that "does not appear right" or "does not belong in the area."

DANGEROUS SUBSTANCE -- This code should be used when the police receive a report that someone has found dynamite, blasting caps, ammunition, etc., and wants the police to investigate. See also 532, Transport dangerous substance, for cases where the request is for the police to haul such items away.

DAMAGED PROPERTY -- A generalized reference to damaged property.

UNINTENTIONALLY DAMAGED PROPERTY -- Code this when there is a request for response or response to call of damaged property where there is no intent (or use of force) to destroy property (e.g., tree fell on house, baseball through window, etc.).

UTILITY PROBLEM -- Code this when there is a request for response or response to call about a public utility problem or dangerous situation (e.g., street lights out, gas leak, down wire, transformer sparks, water main break, open fire hydrant causing flooding).
ENVIRONMENTAL HAZARD OR DISASTER -- Any call or response to call about potential or actual weather or environmental problem (e.g., oil spill, tornado touched down, hail stones, flooding condition).

FIRE (GENERAL) -- Any problem associated with a specific instance of a fire, past or in-progress ongoing fire or suspected fire. See code 802 for fire prevention.

FIRE IN PROGRESS -- Response to report or sighting of fire in progress.

FIRE ALARM/SMOKE -- Use when there is a response to a mechanical or electronic fire alarm.

INTENTIONALLY DAMAGED PROPERTY -- A general reference to property that was damaged intentionally in some manner.

THREAT TO DAMAGE PROPERTY -- A threat to harm property ("I'm gonna knock this shed down.").

BOMB THREAT -- Use for response to report of an explosive set to go off.

VANDALISM -- The malicious damage of property. There has to be intent to damage property.

VANDALISM, RESIDENTIAL -- The malicious damage (or attempted damage) of residential property. There has to be intent to damage property. The following are acts to be coded in this category: egging, smashing mailbox, spray painting, "lawn jobs," window soaping, and felling trees. Do not code acts of minor damage when they are unintentional, such as running through flowers after a ball or breaking a tree limb by swinging on it; incidents like these can be coded as Unintentionally Damaged Property, 310.

VANDALISM, COMMERCIAL -- The malicious damage (or attempt to damage) of such property. There has to be intent to damage property.

VANDALISM, PUBLIC PROPERTY -- The malicious damage (or attempt to damage) of such property. There has to be intent to damage property.

VANDALISM, MOTOR VEHICLE -- The malicious damage (or attempt to damage) of a motor vehicle. As with 341, 342, and 343, there must be intent to damage or else code Unintentionally Damaged Property, 310.

TAMPERING WITH AN AUTO -- Use this code where there is not enough information to specify a theft or an attempted theft, or vandalism. This code would apply, for example, to a report that "there are two boys sitting in my car at ____.

ARSON -- The suspected or actual setting of a fire in which an intention of illegal property damage. Do not code 350 when leaf or grass fire gets out of hand and causes damage; code as Fire in Progress, 321.

ATTEMPTED ARSON

THREATENED ARSON -- The threat to burn another's property (e.g., "I'm gonna burn your house down.").
380 PROBLEMS WITH MONEY/CREDIT/DOCUMENTS -- A generalized reference to some problem with money, credit, or documents.

381 FORGERY OR COUNTERFEITING -- To imitate a signature on a legal document or to imitate legal or exchange tender (e.g., making bogus money and making bogus entertainment tickets.)

382 FRAUD OR EMBEZZLEMENT -- Deceit or trickery with the intent of taking property or cash from another person (e.g., passing bogus money, tokens or tickets, con games, fly-by-night swindle, and altering of financial accounts).

383 BAD CHECK/BAD CREDIT CARD -- Offering a stolen or invalid check, draft, or credit card in a financial transaction

384 REFUSE TO PAY -- Refusal of an individual to give payment for goods or services that were consumed

385 UNFAIR BUSINESS PRACTICE -- Includes mislabeling, bait and switch, overcharging, failure to provide agreed services or goods, or other practices unfair to consumers.

386 LANDLORD - TENANT DISPUTE -- Code for disagreement between landlord & tenant not involving serious argument or other disturbance. Include evictions in this category.

Traffic Problems

410 TRAFFIC ACCIDENT -- A report of a motor vehicle accident where no indication of occurrence or extent of personal injury is given.

411 TRAFFIC ACCIDENT, PROPERTY DAMAGE ONLY -- Anything from a damaged fender to a chain reaction or total wreck that has no personal injury. A collision need not have occurred if property damage results from the efforts of a driver to avoid a collision.

412 TRAFFIC ACCIDENT, PERSONAL INJURY -- Any type of motor vehicle accident where there is bodily injury due to presence in a motor vehicle involved in an accident. An actual collision is not necessary if personal injury occurred as a result of a driver's efforts to avoid a collision.

413 TRAFFIC ACCIDENT, PEDESTRIAN HIT -- Any type of motor vehicle accident where someone other than a rider in a motor vehicle reports bodily injury. The exception to this is a Hit and Run, 420.

414 TRAFFIC FATALITY -- A traffic accident in which someone is killed.

420 HIT AND RUN (person injured) -- Hitting a person with a motor vehicle, or being involved in a personal injury automobile accident, and then escaping. See 421, Leaving the scene, if no injury is involved.

421 LEAVING THE SCENE (property damage) -- Hitting property with a motor vehicle, or being involved in a automobile accident where no personal injuries occur, and then escaping. See 420, Hit and run, if anyone is injured in the accident.

440 ROAD BLOCK -- A police action to block moving traffic on a street, or highway.

450 VEHICLE VIOLATION -- Use for a generalized reference to a violation related to a motor vehicle.
451 PARKING VIOLATION -- Vehicle in violation of street parking ordinance (e.g., double parking, overtime meter, two spaces, too far from curb, wrong direction, no parking zone, etc.).

452 ABANDONED VEHICLE -- Motor vehicle abandoned (i.e., not possible to move on own power or left for junk).

453 EQUIPMENT OR INSPECTION LACKING -- Covers any time police officer suspects, sights, or stops a motor vehicle travelling without proper equipment or current inspection (e.g., tail or head lights out, tail pipe, or other malfunctioning equipment).

454 MISSING OR IMPROPER LICENSE PLATE/REGISTRATION -- Covers any time police officer stops vehicle because license plate is not visible or out of date or registration is found to be missing.

455 ROUTINE CHECK -- Covers any time police officer stops vehicle to "check it over" as a matter of routine or random check.

460 TRAFFIC FLOW PROBLEMS -- Use for a generalized reference to a problem related to traffic flow and its regulation.

461 TRAFFIC SIGNAL DISORDER -- Code when police officer stops to check a report of a disorder or sights a disorder (e.g., malfunctioning traffic light, broken traffic sign, etc.).

462 TRAFFIC OBSTRUCTION OR CONGESTION -- Code when police officer proceeds to investigate or call received for traffic slowdown or stoppage (e.g., unknown tie-up). Do not use this code when a Motor Vehicle Accident is indicated.

463 DIRECT TRAFFIC -- Use this when officer is dispatched to direct traffic or directs traffic as a result of a problem.

464 PEDESTRIAN CONTROL/SCHOOL CROSSING GUARDS -- Use for encounters or calls that involve pedestrian control or the provision of school crossing guards.

465 ROAD CONDITION -- Includes street depression, soft shoulders, falling rocks, washout of road, flooded street.

470 MOVING VIOLATION -- Covers any moving traffic violation for which a violator may receive a citation (with the exception of Hit and Run, 420; Driving While Intoxicated, 471; and Excess Speed, 472) (e.g., reckless driving, running stoplight or sign, not using turn signal, tailgating, open alcohol in car, etc.).

471 DRIVING UNDER THE INFLUENCE -- An encounter or a call involving a suspicion, sighting, or determination of an operator to be driving while intoxicated.

472 EXCESS SPEED -- An encounter or a call involving a suspicion, sighting, or determination of an operator driving faster than the legal limit.

480 ASSIST MOTORIST -- general reference to the need to assist a motorist in some manner either unspecified or not related to disabled vehicle or road directions.

481 DISABLED VEHICLE -- Motor vehicle temporarily broken down (e.g., engine trouble, flat, out of gas, keys locked in car, etc.).

482 ROAD DIRECTIONS -- Code when cit. asks police officer "How do I get to ...."
Service Problems

505  GENERAL REQUEST FOR SERVICE -- A general request for service that cannot be coded within one of the more specific categories.

506  ASSIST PERSON LOCKED IN OR OUT OF HOME, OFFICE, OTHER BUILDING -- Use when the police help someone in such circumstances, or are requested to do so. Do not use for helping a person into a locked car, this is coded as 481, Disabled Vehicle.

507  EMERGENCY - NATURE UNSPECIFIED -- Use when it is clear that the problem is of an emergency nature, but no details that would allow you to specify the problem further are available. E.g., "We've got an emergency down at the warehouse, get there right away!" Include 911 hangups in this category.

510  REQUEST FOR SURVEILLANCE -- A request to have the police look after something in general or an unspecified request for extra patrol.

511  HOUSE/VACATION CHECK OR EXTRA RESIDENTIAL PATROL -- This code applies to request for house check activities of a police officer that involve the surveillance or checking of residence such as would be requested when the occupant is on vacation or trouble has occurred there earlier. When caller reports return from vacation and/or requests termination of house check, use 620 and then 511 in that order.

512  COMMERCIAL DOOR CHECK -- This code applies to the routine activities of a police officer that involve checking to see that doors are locked and windows are closed.

513  STORE OPENING OR CLOSING CALL:"ALARM SET" -- This applies to phoned-in calls where a store is reporting that it is opening or closing so that police can adjust their patrol activity and to situations where police are present to watch store opening or closing.

520  ESCORT -- The request for escort or provision of an officer on foot or in a vehicle to accompany an individual to some destination. Do not code this category if the officer transports an individual from one location to another-(530, 531, 730).

521  EMERGENCY ESCORT -- The request or provision of a vehicle to accompany another vehicle under emergency circumstances (e.g., escort of ambulance, fire truck, or private citizen).

522  BANK/MONEY ESCORT -- The request or provision of Officer or police vehicle to accompany someone making a deposit of money.

523  FUNERAL/PARADE ESCORT -- The request or provision of escort services related to a funeral or parade.

525  POLICE PROTECTION -- Request for police to be present to protect someone from an anticipated threat (e.g., a woman wants police to stand by while she removes her personal belongings from her boyfriend's apartment following a fight).

530  TRANSPORT -- The request for, or response to a request for, taking a person in a vehicle from one location to another; nonmedical transport (e.g., prisoner transport, bringing home accident victim, transporting person with large amount of money). Use 530 when the status of the person to be transported is unknown; otherwise use 531 or 730.

531  TRANSPORT PERSON NOT IN CUSTODY -- Any request, or response to request, for transport where the person to be transported is not in custody.
532 TRANSPORT DANGEROUS SUBSTANCE -- Use this code when the police are requested to transport a dangerous substance from one location to another. For example, a case where someone has found blasting caps and requests the police to remove them to a safe location. See also 293 if no request to transport is made.

540 COURIER -- Code when officer is dispatched (or request for courier) to carry equipment, documents, or other materials for a citizen or public official, or when he provides same (e.g., coffee run for dispatchers, legal papers to courthouse, or other pickup and delivery).

550 ANIMAL PROBLEM -- This code applies to a request or response to any problem that is animal related (e.g., lost, found, dead, rabid, treed, dangerous, etc. animal). It includes violations of local code about pets (e.g., leash laws). Also includes concerns about rodents and other animals concerned with health. Do NOT include noise disturbances (e.g., barking dog) in this category. Code barking dogs as 017.

560 POLICE-COMMUNITY RELATIONS, OFFICER FRIENDLY, SCHOOL VISIT -- Use when an officer makes a PCR type presentation to school group or other type of group. This does not require a formal presentation, just stopping in to give crime prevention information to a block club meeting would qualify.

Information Problems
Note: A 600 is used as the first (or only) code when the incident is primarily information related. A 600 code used as the second problem code means that the request for or offer of info is separate from the first problem. If a second code can be found to describe the info desired or given, place this second code in second problem code slot.

610 CITIZEN WANTS INFORMATION -- An unspecified request for information.

611 CASE-RELATED CRIME INFORMATION -- Code this when an individual wants to know about a specific case or incident (e.g., "Where is my towed car?").

612 CRIME PREVENTION INFORMATION -- Code this when the citizen wants information about crime prevention in general, not related to a specific incident or case.

613 OTHER INFORMATION -- An individual wants information not included in 611 or 612 above (e.g., "How many tickets does it take to lose a license?").

614 DIRECTIONS (NONTRAFFIC) -- Code when a citizen calls in or hails an officer and asks for general, nontraffic directions. (for traffic directions, use 482.)

620 CITIZEN WANTS TO GIVE INFORMATION

621 CRIME-TIP INFORMATION -- Person wants to give information on a crime or suspected violator. This should be information that will help police solve a crime or catch a criminal/violator.

622 NOT CRIME TIP INFORMATION -- Person wants to give information that does not concern solving a crime or catching a criminal/violator.

630 OFFICER WANTS INFORMATION

631 CRIME-TIP INFORMATION -- Officer seeks information about crime, suspects, or criminal activity from a potential informant.

632 NOT CRIME TIP INFORMATION -- Officer seeks information that does not concern detecting or solving a crime or catching a criminal/violator.

640 OFFICER WANTS TO GIVE INFORMATION -- Use when officer initiates contact to tell someone something the officer thinks they need to know.
HOSPITAL OR OTHER MEDICAL REPORT TO THE POLICE -- Use for reports to the police of such items as gunshot wounds, drug overdoses, etc., where the hospital, doctor's office, or other medical facility is notifying the police without (necessarily) requesting that the police take any action.

REQUEST FOR A SPECIFIC POLICE UNIT, PROBLEM UNSPECIFIED -- Use when a caller requests to speak with the juvenile officer, the family crisis unit, the animal control officer, etc., but does not otherwise tell the operator what the problem is that he/she wished to discuss. Calls for service coders could then follow up with a 31 response code (or perhaps an 09) and code the particular type of unit requested with the assignment code (see List of Agency and Police Unit Types).

Legal Procedures

PAPERS TO BE SERVED -- A residual code for a general reference to the need to serve papers.

WARRANT TO BE SERVED -- A request or response to a request for administering a writ authorizing an arrest of an individual to the individual, including traffic warrants.

SUBPOENA/SUMMONS TO BE SERVED -- A request or response to a request about a legal document ordering a person to appear in court or other legal document such as an eviction notice or sheriff's note of closing a business establishment.

SEARCH WARRANT TO BE SERVED -- Service of a search warrant.

ARREST PROCESSING/BOOKING -- The process of processing (booking) an offender at police facilities. Includes fingerprinting, records checks, sobriety tests, breath/blood tests.

TRANSPORT PERSON IN CUSTODY -- A request or the activity of transporting a prisoner from one facility to another. If you are coding an activity (no significant police-citizen interaction), use the appropriate activity code.

INTERROGATION -- Interrogating a suspect (usually at the station after an arrest has been made).

COURT PROCEEDINGS -- Any appearance before an officer of the court (judge, magistrate, prosecutor) to conduct legal process.

OBTAIN WARRANT -- Officer requests or picks up a warrant for arrest/search/subpoena.

HEARING -- Officer brings citizen before a judge or magistrate to file charges, set bail, or conduct other legal process.

ADMINISTRATIVE PROCEEDINGS -- Officer appears before regulatory/administrative agency/official to conduct noncriminal legal proceedings.

Miscellaneous Problems

CIVIL CODE PROBLEMS/VIOLATIONS -- Codes in this category include problems relating to state and local civil/regulatory codes.

BUSINESS REGULATIONS -- Licensing and operation of businesses.

FIRE PREVENTION

LITTER, TRASH, REFUSE, AND PROPERTY APPEARANCE

PARKS AND RECREATION
STREETS AND PUBLIC WAYS

POLLUTION, HEALTH, AND SANITATION

HOUSING

NUISANCE PROPERTY -- Property that is a source of nuisances and disturbances. Use this category only if the concern is with the property and not specified people on the property.

NO PROBLEM ("ALL QUIET") -- Code for a response to investigate a request made to the police officer where the officer indicates nothing is the matter (e.g., outcome of citizen asking to check on suspicious person, "Unable to locate anyone"). Not to be used in coding calls for service. Use this also when citizen misinterprets a situation (e.g., what the citizen believes is a problem actually is not a problem).

NO CONTACT ("GONE ON ARRIVAL")

DON'T KNOW PROBLEM -- Code when no indication is given other than to proceed to a specified location (e.g., "Proceed to 1st St. and wait until further instructions," or request for service is garbled, unintelligible, etc).

NO PROBLEM: Use this when the situation is no longer a problem (e.g., an encounter which appears to be a problem at the beginning of the encounter, but is no longer a problem at its conclusion)

COMPLAINT AGAINST A POLICE OFFICER -- Note this change (see 821). This code should be used when a citizen complains about a police officer, and not about police service in general or in a particular case.

COMPLAINT ABOUT POLICE SERVICE -- Use this code when the citizen's complaint is about police service and not about what a particular officer did (or did not do). e.g., "I've called three times already and no one has shown up yet," or "Why don't we ever see a patrol car out here."

INTERNAL AFFAIRS INVESTIGATION -- Use this code for encounters that result from an officer engaging in an Internal Affairs Investigation.

COMPLIMENTS FOR POLICE -- Code when individual has a compliment about a member of the police department (e.g., courageous police work, beyond the call of duty, courtesy, etc.).

CASUAL CONVERSATION -- Use this code only if there is no apparent problem on the officer's or citizen's mind. Casual conversations unrelated to police work or solving problems fit into this category. Getting-to-know-you chats that have no problem focus should be included here.

PERSONAL BUSINESS -- To be used exclusively for casual encounters where the officer is not engaged in any police business but is clearly engaged in an encounter for his/her personal benefit. This would include running personal errands, purchasing goods and services, ordering meals, spending time with family or close friends.

IRRATIONAL OR CRANK CALL TO POLICE -- Any call for which the request/information provided by citizen literally makes no sense, is irrational, or is overtly a hoax. Do not use the code if there is any question about the authenticity of request/information or if any police personnel indicates to you that the call is (will be found to be) groundless.

FALSE REPORT

OFFICER IN NEED OF AID/PROVIDE WEAPONS COVER -- This is used where officer is dispatched to be back-up firepower in serious incident (e.g., apprehending a dangerous, armed criminal, holed-up armed robbers, sharpshooter needed). Use this if there is a distress call to
aid another officer (e.g., officer down, officer being assaulted, officer needs immediate emergency assistance)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>871</td>
<td>BACK UP AN OFFICER - OTHERWISE UNSPECIFIED, NO EMERGENCY -- Use this code where an officer is</td>
</tr>
<tr>
<td></td>
<td>requested to back up another officer but no problem type is specified. Also there should be no</td>
</tr>
<tr>
<td></td>
<td>mention of an emergency need for back up. If there is an emergency, need, it should be coded as</td>
</tr>
<tr>
<td></td>
<td>870, Officer in need of aid.</td>
</tr>
<tr>
<td>872</td>
<td>NEED AN OFFICER - PROBLEM NOT SPECIFIED -- Use when an officer is instructed to meet another</td>
</tr>
<tr>
<td></td>
<td>officer, but no mention of the problem to be dealt with is made.</td>
</tr>
<tr>
<td>874</td>
<td>ASSIST OTHER DEPARTMENT - PROBLEM NOT SPECIFIED -- Use when an officer is instructed to assist</td>
</tr>
<tr>
<td></td>
<td>another police department, but no mention of the problem to be dealt with is made.</td>
</tr>
</tbody>
</table>
Appendix III
Encounter Instrument
ENCOUNTER INSTRUMENT

1. Ride number?

4. Observer number?

3. Activity/Encounter number?

ENTER THE NUMBER FOR THIS ACTIVITY SEQUENTIALLY FOR THIS RIDE.

4. Time encounter began?

5. Time encounter ended?

6. Community where this activity occurred?

7. Exact Geographic location/address?

8. What information source led directly to this encounter being undertaken?

   1. officer acted on own without apparent request, notification, or command from others
   2. dispatcher
   3. supervisor/administrator (include roll call)
   4. other officer requested/notified
   5. citizen (on-scene)
   6. citizen (by telephone, other)

9. At the time this encounter began, or immediately before, what higher authority in the department instructed the officer to engage in this activity?

   1. no higher authority gave instructions
   2. dispatcher
   3. supervisor/administrator
   4. both 2 and 3
   5. higher authority gave instructions, but not sure who
   6. no instructions from higher authority given, but officer notified higher authority of intentions to do activity

10. How did officer proceed to the scene of this encounter?

    1. motor vehicle: within posted speed; no lights/siren
    2. motor vehicle: within posted speed; lights/siren
    3. motor vehicle: above posted speed; no lights/siren
    4. motor vehicle: above posted speed; lights/siren
    5. foot/bike: walking/normal speed
    6. foot/bike: running/above normal speed
    7. not applicable: officer at scene at beginning of encounter

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11. Nature of initial location of encounter?

- **1** public property, outdoors (e.g., road, sidewalk, park)
- **2** public property, indoors (e.g., government building)
- **3** police facility, outdoors (e.g., police parking lot)
- **4** police facility, indoors (e.g., police station)
- **5** private property, outdoors (e.g., yard, front porch)
- **6** private property, indoors (e.g., home)
- **9** other

12. At any time during this ride did the police indicate or show that they had prior knowledge of this location?

- **1** no
- **2** yes, information from roll call
- **3** yes, heard about it from department or other officers (not roll call)
- **4** yes, direct knowledge from prior visits
- **5** yes, police showed prior knowledge of location, but basis of knowledge not clear


- **0** NO SECOND LOCATION--NOT APPLICABLE
- **1** public property, outdoors (e.g., road, sidewalk, park)
- **2** public property, indoors (e.g., government building)
- **3** police facility, outdoors (e.g., police parking lot)
- **4** police facility, indoors (e.g., police station)
- **5** private property, outdoors (e.g., yard, front porch)
- **6** private property, indoors (e.g., home)
- **9** other

14. What was the level of illumination when this encounter began?

- **1** Daylight/brightly lit room: could readily distinguish facial features and hands of persons if present
- **2** Dim lighting: could distinguish profile or overall size of persons or objects
- **3** Near darkness: could distinguish movement or presence of something, but not enough light to determine size or nature of object
- **4** Total/virtual darkness: unable to see anything

15. Before the encounter began, was there any indication of anticipated violence at the scene?

- **1** no
- **2** yes, from officer
- **3** yes, from other source
- **4** yes, from both officer and other source
16. Was this a BRIEF/CASUAL ENCOUNTER?
   1    no
   2    yes, brief encounter [GO TO Q-52]
   3    yes, casual encounter [GO TO Q-52]

17. Type of problem--as radioed by dispatcher or others:
   CODE 0 IF NOT DISPATCHED OR RADIOED BY OTHER. OTHERWISE, ENTER PROBLEM CODE.

18. Type of problem as it appeared at beginning of encounter:
   ENTER PROBLEM CODE.

19. Type of problem as it appeared at end of encounter: Most Important Problem?
   ENTER PROBLEM CODE.

20. Type of problem as it appeared at end of encounter: Second Most Important Problem?
   ENTER PROBLEM CODE.
   CODE 0 IF NO SECOND PROBLEM IS APPLICABLE.

21. Did the police indicate that the problem in this encounter is part of a larger problem than just the circumstances of this event?
   1    no [GO TO Q-24]
   2    yes

22. What was the nature of the larger problem identified by the police?
   ENTER PROBLEM CODE.

23. During this encounter, did the police try to determine the nature, extent, or causes of the larger problem?
   1    no
   2    yes

24. During this encounter, did the police try to PREVENT the occurrence or recurrence of the problem?
   1    no
   2    yes
25. Was this encounter part of a long-term plan or project to deal with this problem?

1  no [GO TO Q-27]
2  yes, plan focused on specific people or location
3  yes, plan focused on this kind of problem in general
4  yes, unable to determine nature of plan

26. Who created the plan or project of which this encounter was a part?

1  officer—or officer with others
2  other police officers only
3  supervisors or management
4  other
5  unable to determine

27. Who took the decision-making lead in this encounter?

1  O1 only
2  O1 and other police shared equally
3  other police, but not O1
4  O1 and O2 (2-officer unit only)
5  O2 only (2-officer unit only)
6  O2 and other police shared equally (2-officer unit only)
7  unable to determine

28. Did O1 receive advice, guidance, or instructions during this encounter about what to do from a NONSUPERVISOR police officer?
   IF MORE THAN ONE, SELECT THE FIRST THAT OCCURRED.

1  no [GO TO Q-31]
2  yes, take an action
3  yes, do NOT take an action
4  yes, other

29. Which at action was O1 advised to take or not take by another NONSUPERVISOR police officer?

1  arrest/cite someone
2  use force/more force on someone
3  file an official report/how to report the matter
4  notify/summon supervisor
5  mobilize other police/nonpolice for assistance
6  counsel, advise, mediate w/citizen(s)
7  give citizen other personal assistance
8  leave scene/do as little as possible
9  other
30. Did the officer request input from the SUPERVISOR during this encounter? INCLUDE RADIO/MDT/TELEPHONE COMMUNICATIONS.

1 no
2 yes, information, advice, or instruction
3 yes, supervisor presence
4 yes, both 2 and 3
5 yes, not sure which of the above

31. At any time during the ride did the police discuss this encounter with a supervisor? [INCLUDE RADIO/MDT/TELEPHONE]

1 no [GO TO Q-34]
2 yes, before encounter only
3 yes, during encounter only
4 yes, after encounter only
5 yes, before and during encounter
6 yes, before and after encounter
7 yes, during and after encounter
8 yes, before, during, and after encounter

32. Did the supervisor tell the officer what to do regarding THIS encounter? IF MORE THAN ONE, SELECT THE FIRST THAT OCCURRED.

1 no [GO TO Q-34]
2 yes, offered suggestion only: take an action
3 yes, offered suggestion only: do NOT take an action
4 yes, ordered officer: take an action
5 yes, ordered officer: do NOT take an action
6 yes, could not determine which of 2-5 applies

33. What action was O1 advised/ordered to take or not take by the supervisor?

1 arrest/cite someone
2 use force/more force on someone
3 file an official report/how to report the matter
4 notify/summon supervisor
5 mobilize other police/nonpolice for assistance
6 counsel, advise, mediate w/citizen(s)
7 give citizen other personal assistance
8 leave scene/do as little as possible
9 other

34. Was there a supervisor present to observe the officer?

1 no
2 yes
35. Was there another officer present to observe the officer?

1 no
2 yes
3 yes, this is a two officer unit

36. For what percentage of the activity was a supervisor present?

37. During the activity, what percentage was another officer or a supervisor in view of the activity?

38. What percentage of the activity was the officer observed by EITHER another officer or a supervisor?

39. What is the identity of the first supervisor present?

40. What is the identity of the second supervisor present?

41. What is the identity of the third supervisor present?

42. Upon arrival at the scene, how many police officers were already present?

43. Upon arrival at the scene, how many non-sworn service personnel were already present?

44. At the beginning of the encounter, how many citizens (bystanders + participants) were present?

45. Including your assigned officer(s), what was the maximum number of officers present at any one time during the encounter?

46. What was the maximum number of non-sworn service personnel present at any one time during the encounter?

47. What was the maximum number of citizens (bystanders + participants) present at any one time during the encounter?

48. Overall, what was the demographic makeup of the citizens and bystanders?

0 No bystanders
1 Entirely white
2 Mostly white
3 Half white, half nonwhite
4 Mostly nonwhite
5 Entirely nonwhite

49. Did the police seek information from any source other than citizen participants during this encounter?
50. From what source did they seek information?

ENTER AGENCY CODE.

51. Did the observed police call for more police officers to go to the scene?

1   no  [GO TO Q-51]
2   yes

52. Type of problem/situation? [SELECT MOST IMPORTANT]

ENTER PROBLEM CODE

53. Did the police file an official report or indicate an intention to file an official report regarding this encounter?

1   no, neither filed nor intended to file
2   yes, filed an official report
3   yes, intended to file an official report

54. How many times during this activity did the officer request information using the MDT (computer)?

ENTER NUMBER

54b. At any during this encounter, did O1 display a weapon for safety purposes (not necessarily for coercive purposes) in which the citizen was most likely unaware of this action.

1   no
2   yes, O1 displayed PR-24 or flashlight or other nonlethal weapon
3   yes, O1 displayed handgun
4   both 2 & 3
5   did not observe entire encounter

54c. At any during this encounter, did O2 display a weapon for safety purposes (not necessarily for coercive purposes) in which the citizen was most likely unaware of this action.

1   no
2   yes, O2 displayed PR-24 or flashlight or other nonlethal weapon
3   yes, O2 displayed handgun
4   both 2 & 3
5   did not observe entire encounter
6 NA - no O2 present

55. What percentage of this encounter did you observe O1 directly?

    ENTER A NUMBER BETWEEN 0-100.

56. Was another project observer present during this encounter?

    1 no [GO TO Q-58]
    2 yes

57. What was the identification code of the observer present?

    IF MORE THAN ONE OBSERVER PRESENT, SELECT THE NUMBER OF THE
    FIRST ONE YOU OBSERVED]

58. Did the police change their behavior because of your or other observer presence?

    1 no significant change [GO TO Q-61]
    2 yes, a little change
    3 yes, a substantial change

59. In what way did the police change their behavior during this encounter because of observer
    presence?

    1 police more inclined to get involved
    2 police less inclined to get involved
    3 police more inclined to arrest or cite
    4 police less inclined to arrest or cite
    5 police more inclined to use force
    6 police less inclined to use force
    7 other: explain in narrative

60. What is the basis of your judgment that police changed their behavior because of observer
    presence?

    1 police stated that their behavior changed
    2 observer inferred it from behavior or manner of police
    3 other: explain in narrative

61. Did you perform any police tasks during this activity?

    1 no
    2 yes, offered police information, advice, or an opinion
    3 yes, performed some physical aspect of police work
    4 yes, had more than casual communication with citizens
    5 yes, two or more of the above
62. How many citizen forms were filled out for this encounter?
   ENTER NUMBER HERE

63. How many citizens were at this encounter which there was NO citizen form completed?
   ENTER NUMBER HERE
Appendix IV
Citizen Instrument
CITIZEN INSTRUMENT

1. Ride number?

2. Observer number?

3. Encounter number?
   
   ENTER THE NUMBER FOR WHICH THIS CITIZEN IS RELATED

4. Citizen number?
   
   ENTER THE NUMBER SEQUENTIALLY FOR THIS ENCOUNTER. IE, IF THIS IS THE FIRST CITIZEN FORM FOR THE ACTIVITY, ENTER 1, ETC...

5. Time activity began:

6. Time activity ended:

7. What is the citizen's sex?
   
   1     male
   2     female

8. What is the citizen's age?
   
   1     preschool (up to 5 years)
   2     child (6-12)
   3     young teen (13-17)
   4     older teen (18-20)
   5     young adult (21-29)
   6     adult (30-44)
   7     middle-aged (45-59)
   8     senior (60 and above)

9. What is the citizen's race/ethnicity?
   
   1     white
   2     black
   3     Hispanic
   4     Asian
   5     American Indian
   6     other

10. Approximately, what was the citizen's social class?
   
   1     chronic poverty (homeless, no apparent means of support)
   2     low (subsistence only)
   3     middle
   4     above middle
   5     completely unsure

11. In what role did the police place this citizen when first encountering him/her?

   ENTER CITIZEN ROLE CODE.

12. What was the final role placed on this citizen by police (at the end of the encounter)?
ENTER CITIZEN ROLE CODE.
ENTER SAME CITIZEN ROLE CODE AS PREVIOUS ITEM IF ROLE DID NOT CHANGE.

13. What kind of establishment was the citizen representing?
   1. none
   2. business
   3. government agency
   4. church
   5. neighborhood organization
   6. other

14. What was the officer's prior knowledge of this citizen?
   1. no knowledge at all. Citizen is a stranger
   2. knows citizen, but not clear how well
   3. recognizes citizen's face or knows reputation, but no detailed knowledge
   4. knows by name and a little knowledge of citizen, but not detailed
   5. knows citizen very well (personal background, address, friends, family, personal habits)

15. Is there any indication that this citizen lives, routinely works, or owns property at or near the encounter location (within 3 city blocks or 1/4 mile)?
   SELECT HIGHEST APPLICABLE NUMBER.
   1. no, citizen does not
   2. yes, works at or near location
   3. yes, owns property at or near location
   4. yes, lives at or near location
   5. unsure/can’t tell

16. Did this citizen appear to be under the influence of alcohol or other drugs?
   1. no indication of alcohol/drug use
   2. indication of use, but no visible effects on behavior
   3. slight behavioral indications (slight speech)
   4. strong behavioral indications (strong speech, difficulty standing/understanding conversation)
   5. unconscious

16b. Was there any reason to believe this citizen was involved with drugs (use or sale)?
   1. no
   2. yes
   3. yes, officer stated citizen probably uses or sells drugs

17. Did this citizen show any signs of mental disorder?
   1. no
   2. yes

18. Did this citizen show any signs of physical injury or illness requiring immediate medical attention?
   1. no
   2. yes, minor injury or illness
   3. yes, serious injury or illness
19. Did this citizen have a weapon in his/her possession or within "jump and reach?"
   SELECT HIGHEST NUMBER APPLICABLE.
   1 no weapon evident  [GO TO Q-21]
   2 incapacitating device (mace, pepper spray)
   3 blunt/martial arts instrument
   4 knife/stabbing/cutting instrument
   5 other weapon
   6 firearm

20. Was this weapon concealed from the police at any time during the encounter?
   1 no
   2 yes, on citizen's person
   3 yes, not on citizen's person

21. Did the citizen threaten to assault the police?
   1 no
   2 yes, before the police attempted to arrest or physically control citizen
   3 yes, during or after police attempted to arrest or physically control citizen
   4 yes, both 2 and 3 above

22. Did the citizen physically assault the police?
   1 no
   2 yes, before the police attempted to arrest or physically control citizen
   3 yes, during or after police attempted to arrest or physically control citizen
   4 yes, both 2 and 3 above

23. Did the citizen physically assault another citizen while the police were at the scene?
   1 no (skip to q-25)
   2 yes

24. What was the citizen number who received the attack?
   ENTER OTHER CITIZEN NUMBER HERE

25. Did the citizen commit any nonviolent criminal act while in the officer’s presence?
   1 no (skip to q-27)
   2 yes

26. What type of offense was committed?
   ENTER OFFENSE CODE HERE

27. Did this citizen flee or attempt to flee the police?
   1 no
   2 yes, before the police attempted to arrest or physically control citizen
   3 yes, during or after police attempted to arrest or physically control citizen
   4 yes, both 2 and 3 above

28. Did this citizen summon the police to this encounter?
1. no
2. yes
3. not clear whether citizen summoned police

29. Was this a BRIEF/CASUAL ENCOUNTER?
   1. no
   2. yes, brief encounter [GO TO Q-134]
   3. yes, casual encounter [GO TO Q-134]

30. Did the citizen ask the police to arrest another citizen involved in this encounter?
   1. no [GO TO Q-32]
   2. yes

31. How did the police respond to citizen's request to arrest another citizen?
   SELECT HIGHEST NUMBER APPLICABLE.
   1. ignored request without acknowledging it
   2. explicitly refused to comply without saying why
   3. declined to comply and explained why
   4. promised to comply at some future time
   5. partially complied in citizen's presence
   6. complied fully in citizen's presence

32. Did the citizen ask the police NOT to arrest or cite someone else?
   1. no [GO TO Q-34]
   2. yes

33. How did the police respond to the citizen's request NOT to arrest or cite someone else?
   SELECT HIGHEST NUMBER APPLICABLE.
   1. ignored request without acknowledging it
   2. explicitly refused to comply without saying why
   3. declined to comply and explained why
   4. promised to comply at some future time
   5. partially complied in citizen's presence
   6. complied fully in citizen's presence

34. Did the citizen ask the police to advise or persuade another citizen (not a representative of service organization) to do something?
   1. no [GO TO Q-36]
   2. yes

35. How did the police respond to the citizen's request to advise or persuade another citizen to do something?
   SELECT HIGHEST NUMBER APPLICABLE.
   1. ignored request without acknowledging it
   2. explicitly refused to comply without saying why
   3. declined to comply and explained why
   4. promised to comply at some future time
   5. partially complied in citizen's presence
   6. complied fully in citizen's presence
36. Did the citizen ask the police to warn or threaten another citizen?

1. no [GO TO Q-38]
2. yes

37. How did the police respond to the citizen's request to warn or threaten another citizen? SELECT HIGHEST NUMBER APPLICABLE.

1. ignored request without acknowledging it
2. explicitly refused to comply without saying why
3. declined to comply and explained why
4. promised to comply at some future time
5. partially complied in citizen's presence
6. complied fully in citizen's presence

38. Did the citizen ask the police to make another citizen leave the scene?

1. no [GO TO Q-40]
2. yes

39. How did the police respond to the citizen's request to make another citizen leave the scene? SELECT HIGHEST NUMBER APPLICABLE.

1. ignored request without acknowledging it
2. explicitly refused to comply without saying why
3. declined to comply and explained why
4. promised to comply at some future time
5. partially complied in citizen's presence
6. complied fully in citizen's presence

40. Did the citizen ask the police to file a report?

1. no [GO TO Q-42]
2. yes

41. How did the police respond to the citizen's request to file a report? SELECT HIGHEST NUMBER APPLICABLE.

1. ignored request without acknowledging it
2. explicitly refused to comply without saying why
3. declined to comply and explained why
4. promised to comply at some future time
5. partially complied in citizen's presence
6. complied fully in citizen's presence

42. Did the citizen ask police to act on the citizen's behalf with a government official/agency, or private organization?

1. no [GO TO Q-46]
2. yes

43. How did the police respond to the citizen's request to act on his/her behalf with a government official/agency, or private organization? SELECT HIGHEST NUMBER APPLICABLE.

1. ignored request without acknowledging it [GO TO Q-46]
2. explicitly refused to comply without saying why [GO TO Q-46]
3. declined to comply and explained why [GO TO Q-46]
4. promised to comply at some future time
5. partially complied in citizen's presence
6  complied fully in citizen's presence

44. What agency/organization did police contact or promise to contact on the citizen's behalf?

    ENTER AGENCY CODE.

45. What agency/organization did police contact or promise to contact on the citizen's behalf--on their OWN INITIATIVE (without citizen's request)?

    ENTER AGENCY CODE.

    ENTER ZERO IF POLICE DID NOT CONTACT/PROMISE CONTACT ON OWN INITIATIVE.

46. Did the citizen ask the police for physical assistance for self or others?

    1  no [GO TO Q-48]
    2  yes

47. How did the police respond to the citizen's request for physical assistance for self or others? SELECT HIGHEST NUMBER APPLICABLE.

    1  ignored request without acknowledging it
    2  explicitly refused to comply without saying why
    3  declined to comply and explained why
    4  promised to comply at some future time
    5  partially complied in citizen's presence
    6  complied fully in citizen's presence

48. Did the police provide physical assistance to this citizen on their OWN INITIATIVE (without citizen's request)?

    1  no
    2  yes

49. Did the citizen ask police for information on how to deal with a problem?

    1  no [GO TO Q-51]
    2  yes

50. How did the police respond to the citizen's request for information on how to deal with a problem?

    SELECT HIGHEST NUMBER APPLICABLE.

    1  ignored request without acknowledging it
    2  explicitly refused to comply without saying why
    3  declined to comply and explained why
    4  promised to comply at some future time
    5  partially complied in citizen's presence
    6  complied fully in citizen's presence

51. Did the police provide this citizen information on how to deal with a problem on their OWN INITIATIVE (without citizen's request)?

    1  no
    2  yes

52. Did the police threaten to issue a citation to this citizen?
1. no
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

53. Did the police issue a citation (or summons to appear before a magistrate) to this citizen?

1. no [GO TO Q-55]
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

54. For what offense was the citizen CITED? [FIRST OFFENSE]

ENTER OFFENSE CODE. DO NOT USE FELONY OR MISDEMEANOR CODES.

55. Did the police notify, promise, or threaten to notify another government agency about citizen's wrongdoing?

1. no [GO TO Q-57]
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

56. What agency did police notify, promise, or threaten to notify about citizen's wrongdoing?

ENTER AGENCY CODE.

57. Did the police check for outstanding arrest warrants on this citizen?

1. no
2. yes

58. Did the police hold a warrant to arrest this person?

1. no
2. yes, held by officer(s) at scene
3. yes, held by other police or legal authority not at scene

58b. Was there probable cause to believe this person had committed an offense

1. no (GO TO Q-59)
2. yes

58c. What was the offense code of the most serious offense?

USE OFFENSE CODES

59. Did the police threaten to charge this citizen with a criminal offense?
1    no
2    yes, O1 only
3    yes, O1 and other police
4    yes, other police but not O1
5    yes, both O1 and O2 (2-officer unit only)
6    yes, O2 only (2-officer unit only)
7    yes, O2 and other police (2-officer unit only)

60. Did the police arrest this citizen?

1    no [GO TO Q-69]
2    yes

61. What is the FIRST offense with which the citizen was charged?

ENTER OFFENSE CODE.

62. BEFORE arresting the citizen for this offense, did police observe this citizen engage in an illegal act or observe circumstantial evidence of an illegal act?

SELECT HIGHEST NUMBER APPLICABLE

1    no
2    yes, observed circumstantial evidence of illegal behavior
3    yes, observed citizen perform illegal act
4    yes, observed both circumstantial evidence and observed the citizen perform an illegal act

63. BEFORE arresting the citizen for this offense, did the police observe physical evidence that implicated this citizen in the offense?

SELECT HIGHEST NUMBER APPLICABLE.

1    no
2    yes

64. BEFORE arresting the citizen for this offense, did the police hear claims from others that implicated this citizen in the offense?

SELECT HIGHEST NUMBER APPLICABLE.

1    no
2    yes, other citizen(s) had second-hand information implicating this citizen
3    yes, other citizen(s) observed citizen commit the offense
4    yes, this citizen fit the description of someone known to the officer as wanted by the police

65. BEFORE arresting the citizen for this offense, did the police hear this citizen confess to this offense?

SELECT HIGHEST NUMBER APPLICABLE.

1    no
2    yes, partial confession (admitted involvement short of committing offense)
3    yes, full confession

66. BEFORE being arrested, what was the citizen demeanor toward the police?

1    Very deferential
2    Merely civil
3    Passive aggressive
4    moderately hostile/disrespectful
5    highly hostile/disrespectful

66b. BEFORE the citizen was arrested for this offense, did the police show disrespect to this citizen?
1. no (GO TO 67b)
2. yes, ignored citizen requests
3. yes, minor disrespect (unnecessary remarks)
4. yes, racial or lifestyle slurs
5. yes, swearing at the citizen
6. yes, shouting at the citizen
7. yes, combination of 6 and any other of the above

67. Who showed this disrespect?

1. no
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

67b. What was the demeanor of the citizen immediately after arrest?

1. Very deferential
2. Merely civil
3. Passive aggressive
4. moderately hostile/disrespectful
5. highly hostile/disrespectful

67c. What was the demeanor of the citizen at the conclusion of the encounter?

1. Very deferential
2. Merely civil
3. Passive aggressive
4. moderately hostile/disrespectful
5. highly hostile/disrespectful

68. Who showed disrespect first, this citizen or the police?

[CODE 0 IF ONLY ONE OF THE PARTIES OR NONE OF THE PARTIES WAS DISRESPECTFUL]

0. not applicable: only one/none of parties was disrespectful [GO TO Q-76]
1. citizen [GO TO Q-75]
2. police [GO TO Q-75]

69. Did police observe this citizen engage in an illegal act or observe circumstantial evidence of an illegal act? SELECT HIGHEST NUMBER APPLICABLE

1. no
2. yes, observed circumstantial evidence of illegal behavior
3. yes, observed citizen perform illegal act
4. yes, observed both circumstantial evidence and observed the citizen perform an illegal act

70. Did the police observe physical evidence that implicated this citizen in a legal offense? SELECT HIGHEST NUMBER APPLICABLE.

1. no
2. yes
71. Did the police **hear claims from others** that implicated this citizen in a legal offense? SELECT HIGHEST NUMBER APPLICABLE.

   1  no
   2  yes, other citizens provided a description, but not citizen's name
   3  yes, other citizens provided this citizen's name
   4  yes, this citizen fit the description of someone known to the officer as wanted by the police

72. Did the police hear this citizen confess to a legal violation? SELECT HIGHEST NUMBER APPLICABLE.

   1  no
   2  yes, partial confession (admitted involvement short of committing crime)
   3  yes, full confession

73. What was the citizen demeanor toward the police during the interaction?

   1  Very deferential
   2  Merely civil
   3  Passive aggressive
   4  moderately hostile/disrespectful
   5  highly hostile/disrespectful

73b. Did the police show disrespect to this citizen?

   1  no (GO TO 75b)
   2  yes, ignored citizen requests
   3  yes, minor disrespect (unnecessary remarks)
   4  yes, racial or lifestyle slurs
   5  yes, swearing at the citizen
   6  yes, shouting at the citizen
   7  yes, combination of 6 and any other of the above

74. Who showed disrespect?

   1  no
   2  yes, O1 only
   3  yes, O1 and other police
   4  yes, other police but not O1
   5  yes, both O1 and O2 (2-officer unit only)
   6  yes, O2 only (2-officer unit only)
   7  yes, O2 and other police (2-officer unit only)

75. Who showed disrespect first, this citizen or the police?

   [CODE 0 IF ONLY ONE OF THE PARTIES OR NONE OF THE PARTIES WAS DISRESPECTFUL]

   1  citizen
   2  police

76. Did the police interrogate this citizen?

   1  no
   2  yes, O1 only
   3  yes, O1 and other police
   4  yes, other police but not O1
   5  yes, both O1 and O2 (2-officer unit only)
   6  yes, O2 only (2-officer unit only)
77. Did the police hold a warrant to search for evidence on this person or his/her property?

1. no
2. yes

78. Did the police conduct a search of any of the following: the citizen, the area immediately around the citizen, his/her possessions, home, or automobile?

1. no [GO TO Q-80]
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

79. Which search was conducted before the citizen was arrested?

1. NOT APPLICABLE: Citizen was not arrested
2. the citizen's person
3. area immediately around the citizen
4. citizen's personal possessions
5. citizen's home
6. citizen's automobile
7. two or more of the above
8. search was conducted AFTER arrest

80. Did the police threaten to use physical force on this citizen? [INCLUDE BOTH VERBAL THREATS AND GESTURES.]

1. no
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

80b. At any during this encounter, did O1 display a weapon for safety purposes (not necessarily for coercive purposes) in which the citizen was most likely unaware of this action.

1. no
2. yes, O1 displayed PR-24 or flashlight or other nonlethal weapon
3. yes, O1 displayed handgun
4. both 2 & 3
5. did not observe entire encounter

80c. At any during this encounter, did O2 display a weapon for safety purposes (not necessarily for coercive purposes) in which the citizen was most likely unaware of this action.

1. no
2. yes, O2 displayed PR-24 or flashlight or other nonlethal weapon
3. yes, O2 displayed handgun
4. both 2 & 3
5. did not observe entire encounter
6. NA - no O2 present
81. Did the police use a firm grip or non-pain restraint on this person?

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<tbody>
<tr>
<td>1</td>
<td>no</td>
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<tr>
<td>2</td>
<td>yes, O1 only</td>
</tr>
<tr>
<td>3</td>
<td>yes, O1 and other police</td>
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<tr>
<td>4</td>
<td>yes, other police but not O1</td>
</tr>
<tr>
<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
</tr>
<tr>
<td>7</td>
<td>yes, O2 and other police (2-officer unit only)</td>
</tr>
</tbody>
</table>

81. Did the police handcuff this person?

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<tbody>
<tr>
<td>1</td>
<td>no</td>
</tr>
<tr>
<td>2</td>
<td>yes, O1 only</td>
</tr>
<tr>
<td>3</td>
<td>yes, O1 and other police</td>
</tr>
<tr>
<td>4</td>
<td>yes, other police but not O1</td>
</tr>
<tr>
<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
</tr>
<tr>
<td>7</td>
<td>yes, O2 and other police (2-officer unit only)</td>
</tr>
</tbody>
</table>

83. Did the police use pain compliance on this person (hammerlock, wristlock, finger grip, carotid control, bar arm control)?

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<tbody>
<tr>
<td>1</td>
<td>no</td>
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<tr>
<td>2</td>
<td>yes, O1 only</td>
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<tr>
<td>3</td>
<td>yes, O1 and other police</td>
</tr>
<tr>
<td>4</td>
<td>yes, other police but not O1</td>
</tr>
<tr>
<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
</tr>
<tr>
<td>7</td>
<td>yes, O2 and other police (2-officer unit only)</td>
</tr>
</tbody>
</table>

84. Did the police use impact or incapacitation methods on this person (striking with body or weapon, mace, taser)?

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<tbody>
<tr>
<td>1</td>
<td>no</td>
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<tr>
<td>2</td>
<td>yes, O1 only</td>
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<tr>
<td>3</td>
<td>yes, O1 and other police</td>
</tr>
<tr>
<td>4</td>
<td>yes, other police but not O1</td>
</tr>
<tr>
<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
</tr>
<tr>
<td>7</td>
<td>yes, O2 and other police (2-officer unit only)</td>
</tr>
</tbody>
</table>

85. Did the police draw or discharge their firearm in this citizen's presence?

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<tbody>
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<td>no</td>
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<td>2</td>
<td>yes, O1 only</td>
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<td>3</td>
<td>yes, O1 and other police</td>
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<td>4</td>
<td>yes, other police but not O1</td>
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<tr>
<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
</tr>
<tr>
<td>7</td>
<td>yes, O2 and other police (2-officer unit only)</td>
</tr>
</tbody>
</table>

86. Did the police ask/tell the citizen to sign a formal complaint?

**FIRST APPROACH**

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<tbody>
<tr>
<td>1</td>
<td>no [GO TO Q-89]</td>
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<tr>
<td>2</td>
<td>yes, suggested only</td>
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<tr>
<td>3</td>
<td>yes, requested only</td>
</tr>
<tr>
<td>4</td>
<td>yes, tried persuasion</td>
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87. What was the last approach police used to get the citizen to sign a formal complaint?

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<tr>
<th></th>
<th>2</th>
<th>suggested only</th>
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<tr>
<td></td>
<td>3</td>
<td>requested only</td>
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<tr>
<td></td>
<td>4</td>
<td>tried persuasion</td>
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<td></td>
<td>6</td>
<td>commanded citizen</td>
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<tr>
<td></td>
<td>7</td>
<td>threatened citizen explicitly</td>
</tr>
</tbody>
</table>

88. What was the citizen's final response to this request? (Sign formal complaint)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>no indication one way or the other</th>
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<tr>
<td></td>
<td>2</td>
<td>refused</td>
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<tr>
<td></td>
<td>3</td>
<td>said he/she would do it, but didn't do it in presence of police</td>
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<tr>
<td></td>
<td>4</td>
<td>did it in police presence</td>
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</tbody>
</table>

89. Did the police ask/tell the citizen NOT to sign a formal complaint? FIRST APPROACH

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<th></th>
<th>1</th>
<th>no [GO TO Q-92]</th>
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<tr>
<td></td>
<td>2</td>
<td>yes, suggested only</td>
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<td></td>
<td>3</td>
<td>yes, requested only</td>
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<tr>
<td></td>
<td>4</td>
<td>yes, tried persuasion</td>
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<tr>
<td></td>
<td>5</td>
<td>yes, tried negotiation</td>
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<td></td>
<td>6</td>
<td>yes, commanded citizen</td>
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<td></td>
<td>7</td>
<td>yes, threatened citizen explicitly</td>
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</table>

90. What was the last approach police used to get the citizen NOT to sign a formal complaint?

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<tr>
<th></th>
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<td>commanded citizen</td>
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<td></td>
<td>7</td>
<td>threatened citizen explicitly</td>
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</table>

91. What was the citizen's final response to this request? (NOT sign formal complaint)

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<th></th>
<th>1</th>
<th>no indication one way or the other</th>
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<tr>
<td></td>
<td>2</td>
<td>refused</td>
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<tr>
<td></td>
<td>3</td>
<td>said he/she would do it, but didn't do it in presence of police</td>
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<tr>
<td></td>
<td>4</td>
<td>did it in police presence</td>
</tr>
</tbody>
</table>

92. Did the police ask/tell the citizen to use the legal process to solve their problem? FIRST APPROACH

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<th></th>
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<th>no [GO TO Q-95]</th>
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<tr>
<td></td>
<td>2</td>
<td>yes, suggested only</td>
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<td>3</td>
<td>yes, requested only</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>yes, tried persuasion</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>yes, tried negotiation</td>
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<tr>
<td></td>
<td>6</td>
<td>yes, commanded citizen</td>
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<tr>
<td></td>
<td>7</td>
<td>yes, threatened citizen explicitly</td>
</tr>
</tbody>
</table>

93. What was the last approach police used to get the citizen to use the legal process?
2 suggested only
3 requested only
4 tried persuasion
5 tried negotiation
6 commanded citizen
7 threatened citizen explicitly

94. What was the citizen's final response to this request? (Use legal process)

1 no indication one way or the other
2 refused
3 said he/she would do it, but didn't do it in presence of police
4 did it in police presence

95. Did the police ask/tell the citizen to seek the help of other service agencies to solve the problem? FIRST APPROACH

1 no [GO TO Q-99]
2 yes, suggested only
3 yes, requested only
4 yes, tried persuasion
5 yes, tried negotiation
6 yes, commanded citizen
7 yes, threatened citizen explicitly

96. What was the other service agency/organization police asked the citizen to use?

ENTER AGENCY CODE.

97. What was the last approach police used to get the citizen to seek the help of other service agencies?

2 suggested only
3 requested only
4 tried persuasion
5 tried negotiation
6 commanded citizen
7 threatened citizen explicitly

98. What was the citizen's final response to this request? (Get help from other service agency)

1 no indication one way or the other
2 refused
3 said he/she would do it, but didn't do it in presence of police
4 did it in police presence

99. Did the police tell/ask the citizen to help another person with their problem? FIRST APPROACH

1 no [GO TO Q-102]
2 yes, suggested only
3 yes, requested only
4 yes, tried persuasion
5 yes, tried negotiation
6 yes, commanded citizen
7 yes, threatened citizen explicitly

100. What was the last approach police used to get the citizen to help another person with their problem?
4 tried persuasion
5 tried negotiation
6 commanded citizen
7 threatened citizen explicitly

101. What was the citizen's final response to this request? (Help another person with their problem)

1 no indication one way or the other
2 refused
3 said he/she would do it, but didn't do it in presence of police
4 did it in police presence

102. Did the police tell/ask the citizen to seek the help of family or friends with his/her problem? FIRST APPROACH

1 no [GO TO Q-105]
2 yes, suggested only
3 yes, requested only
4 yes, tried persuasion
5 yes, tried negotiation
6 yes, commanded citizen
7 yes, threatened citizen explicitly

103. What was the last approach police used to get the citizen to seek the help of family or friends with his/her problem?

2 suggested only
3 requested only
4 tried persuasion
5 tried negotiation
6 commanded citizen
7 threatened citizen explicitly

104. What was the citizen's final response to this request? (Seek the help of family or friends)?

1 no indication one way or the other
2 refused
3 said he/she would do it, but didn't do it in presence of police
4 did it in police presence

105. Did the police tell/ask the citizen to leave another person alone, stop bothering them, or leave the premises? FIRST APPROACH

1 no [GO TO Q-108]
2 yes, suggested only
3 yes, requested only
4 yes, tried persuasion
5 yes, tried negotiation
6 yes, commanded citizen
7 yes, threatened citizen explicitly

106. What was the last approach police used to get the citizen to leave another person alone, stop bothering them, or leave the premises?

2 suggested only
3 requested only
4 tried persuasion
5 tried negotiation
6 commanded citizen
7 threatened citizen explicitly
107. What was the citizen's final response to this request? (Leave other person alone, leave premises, etc.)

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
4. did it in police presence

108. Did the police tell/ask the citizen to cease disorderly behavior? FIRST APPROACH

1. no [GO TO Q-111]
2. yes, suggested only
3. yes, requested only
4. yes, tried persuasion
5. yes, tried negotiation
6. yes, commanded citizen
7. yes, threatened citizen explicitly

109. What was the last approach police used to get the citizen to cease disorderly behavior?

2. suggested only
3. requested only
4. tried persuasion
5. tried negotiation
6. commanded citizen
7. threatened citizen explicitly

110. What was the citizen's final response to this request? (Cease disorderly behavior)?

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
4. did it in police presence

111. Did the police tell/ask the citizen to discontinue illegal behavior? FIRST APPROACH

1. no [GO TO Q-114]
2. yes, suggested only
3. yes, requested only
4. yes, tried persuasion
5. yes, tried negotiation
6. yes, commanded citizen
7. yes, threatened citizen explicitly

112. What was the last approach police used to get the citizen to discontinue illegal behavior?

2. suggested only
3. requested only
4. tried persuasion
5. tried negotiation
6. commanded citizen
7. threatened citizen explicitly

113. What was the citizen's final response to this request? (Discontinue illegal behavior)

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
114. Did the police tell/ask the citizen to provide information about the identity or location of a suspected wrongdoer?

**FIRST APPROACH**

1. no [GO TO Q-117]
2. yes, suggested only
3. yes, requested only
4. yes, tried persuasion
5. yes, tried negotiation
6. yes, commanded citizen
7. yes, threatened citizen explicitly

115. What was the last approach police used to try to get the citizen to identify or locate a suspected wrongdoer?

2. suggested only
3. requested only
4. tried persuasion
5. tried negotiation
6. commanded citizen
7. threatened citizen explicitly

116. What was the citizen's final response to this request? (Provide information on identity/location of wrongdoer)

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
4. did it in police presence

117. Did the police tell/ask the citizen to control the person or animal responsible for this problem?

**FIRST APPROACH**

1. no [GO TO Q-120]
2. yes, suggested only
3. yes, requested only
4. yes, tried persuasion
5. yes, tried negotiation
6. yes, commanded citizen
7. yes, threatened citizen explicitly

118. What was the last approach police used to try to get the citizen to control the person or animal responsible for this problem?

2. suggested only
3. requested only
4. tried persuasion
5. tried negotiation
6. commanded citizen
7. threatened citizen explicitly

119. What was the citizen's final response to this request? (Control the person/animal responsible for this problem)

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
4. did it in police presence

120. Did the police tell/ask the citizen to call the police if the problem occurs again?
188

1. Did the police tell the citizen NOT to call the police if the problem occurs again?

1. no
2. yes

2. Did the police comfort or reassure the citizen?

1. no
2. yes, O1 only
3. yes, O1 and other police
4. yes, other police but not O1
5. yes, both O1 and O2 (2-officer unit only)
6. yes, O2 only (2-officer unit only)
7. yes, O2 and other police (2-officer unit only)

3. Was there a dispute between at least 2 citizens on opposite sides of an issue?

1. no
2. yes
3. yes, domestic dispute

4. During the encounter, with what other citizen present did this citizen show conflict?

ENTER THE CITIZEN NUMBER OF THAT CITIZEN.

-9 cit in conflict w/other person present who does not qualify as a citizen participant in this encounter

0 cit was not in conflict with any other citizens present

[IF 0, GO TO Q-131]

5. What action did this citizen take toward the other citizen when the officer FIRST observed them interact?

THIS CITIZEN'S FIRST ACTION TOWARD OTHER CITIZEN

1. no conflict behavior
2. calm verbal disagreement (no threats)
3. agitated verbal disagreement (no threats)
4. threatened to harm other citizen
5. assaulted other citizen

6. What action did the other citizen take toward this citizen when the officer FIRST observed them interact?

OTHER CITIZEN'S FIRST ACTION TOWARD THIS CITIZEN

1. no conflict behavior
2. calm verbal disagreement (no threats)
3. agitated verbal disagreement (no threats)
4. threatened harm to this citizen
5. assaulted this citizen

7. What was the MOST intense action taken by this citizen toward the other citizen during the encounter? THIS CITIZEN'S ACTIONS TOWARD OTHER CITIZEN: MOST INTENSE. SELECT HIGHEST NUMBER APPLICABLE.
189. What was the MOST intense action taken by the other citizen toward this citizen during the encounter? OTHER CITIZEN'S ACTIONS TOWARD THIS CITIZEN: MOST INTENSE. SELECT HIGHEST NUMBER APPLICABLE.

1. no conflict behavior
2. calm verbal disagreement (no threats)
3. agitated verbal disagreement (no threats)
4. threatened to harm other citizen
5. assaulted other citizen

128. What was the MOST intense action taken by the other citizen toward this citizen during the encounter? OTHER CITIZEN'S ACTIONS TOWARD THIS CITIZEN: MOST INTENSE. SELECT HIGHEST NUMBER APPLICABLE.

1. no conflict behavior
2. calm verbal disagreement (no threats)
3. agitated verbal disagreement (no threats)
4. threatened harm to this citizen
5. assaulted this citizen

129. At the conclusion of the encounter, what was the nature of the conflict between these two citizens?

1. one or both citizens had departed the scene
2. amicably reconciled
3. calm disagreement (no threats)
4. agitated verbal disagreement (no threats)
5. threats of harm offered
6. in physical conflict

130. What was the relationship between these two citizens?

1. strangers
2. casually acquainted
3. well acquainted: relatives, household members
4. well acquainted: friends
5. well acquainted: neighbors
6. well acquainted: coworkers, long-term business associates
7. could not determine relationship

131. Was this citizen in conflict with another citizen who was NOT present during this encounter?

1. no
2. yes, strangers
3. yes, casually acquainted
4. yes, well acquainted: relatives, household members
5. yes, well acquainted: friends
6. yes, well acquainted: neighbors
7. yes, well acquainted: coworkers, long-term business associates
8. yes, could not determine relationship

132. Was this citizen encouraged to cooperate with police by another citizen present during this encounter (including bystanders)?

1. no
2. yes

133. Was this citizen encouraged NOT to cooperate with police by another citizen present during this encounter (including bystanders)?

DO NOT CODE THIS ITEM 0 UNLESS THIS WAS A BRIEF OR CASUAL ENCOUNTER

1. no [GO TO Q-139]
134. What did the citizen request/demand of the police? SELECT MOST IMPORTANT

1. nothing [GO TO Q-136]
2. directions
3. information about police or other local services
4. other information/assistance
5. investigate problem/situation
6. deal with people causing problem for citizen
7. greetings, casual conversation
8. other

135. How did the police respond to the citizen's request/demand? SELECT HIGHEST NUMBER APPLICABLE

1. ignored request without acknowledging it
2. explicitly refused to comply without saying why
3. declined to comply and explained why
4. promised to comply at some future time
5. partially complied in citizen's presence
6. complied fully in citizen's presence

136. What did the police request/demand of the citizen? SELECT MOST IMPORTANT.

1. nothing [GO TO Q-139]
3. information about other suspect, crime, or disorder
4. other type of information/assistance to police
5. stop doing something disorderly, illegal, dangerous, leave scene
6. greeting, casual conversation
7. goods or services (e.g., purchases)
8. other

137. How did police communicate the request/demand?

2. suggested only
3. requested only
4. tried persuasion
5. tried negotiation
6. commanded citizen
7. threatened citizen explicitly

138. What was the citizen's final response to this request?

1. no indication one way or the other
2. refused
3. said he/she would do it, but didn't do it in presence of police
4. did it in police presence

139. Did the citizen change his/her behavior because of your or other project observer's presence or actions during the encounter?

1. no significant change [GO TO Q-141]
2. yes, a little change
3. yes, a substantial change

140. What is the basis of your judgment that the citizen changed his/her behavior because of your or other observer presence?
1 citizen stated that his/her behavior changed
2 observer inferred it from behavior or manner of citizen
3 other

141. At the beginning of this encounter was the citizen in custody?

1 no
2 yes, had been taken into protective custody earlier by observed officer(s)
3 yes, had been taken into protective custody earlier by other than observed officers
4 yes, had been taken into police custody earlier by observed officer(s)
5 yes, had been taken into police custody earlier by other than observed officers

142. At the end of this encounter was the citizen in custody?

1 no
2 yes, protective custody
3 yes, police custody

143. What best characterizes the citizen's emotional state at the beginning of the contact?

1 not elevated (calm)
2 elevated--fear or anger
3 elevated--happy
4 depressed--sadness, remorse

144. What best characterizes the citizen's emotional state at the end of the contact?

1 not elevated (calm)
2 elevated--fear or anger
3 elevated--happy
4 depressed--sadness, remorse
CITIZEN ROLE CODES

1 **victim**: complainant, injured or wronged party.
   Indications from police: queries about harm/injury done to citizen, comfort and assistance offered. Indications from citizen: describes self as wronged/injured party.

2 **suspect**: peace disturber, wrongdoer, person complained about.
   Indications from police: interrogation, searching, threats and warnings, use of force to prevent/stop wrongdoing, arrest, citation.
   Indications from citizen: confessions and admissions of crime, disorder, wrongdoing.

3 **disputant**: person whose role as victim or suspect is unclear or who may be both.
   Indications from police: police listen to citizen's side of story and other party's side of story; police do not separate parties to conflict into wrongdoer & wronged.
   Indications from citizen: claims to be wronged party while other party claims that citizen is wrongdoer; citizen admits to wrongdoing but also claims to have been wronged.

4 **service recipient**: neither 1, 2, or 3 above--but requests service for self.

5 **helpless person**: in need of police assistance but unable or incompetent to request help (sick, injured, lost child, mentally deranged).

6 **third party**: desires no assistance for self, but only for others [USE ONLY IF 1-5 ABOVE ARE NOT APPLICABLE].
   Citizen acts as advocate on behalf of another citizen.

7 **witness**: or person with potentially useful information [FOR WHOM CODES 1-6 DO NOT APPLY].
   Indications from police: police ask questions about problem--but not focused on citizen's role as suspect or victim.
   Indications from citizen: citizen volunteers information about problem--but not focused on citizen's role as suspect or victim.

8 **quasi-police**: acting in occupational capacity (security or guard).

9 **non-police service provider**: waitresses/waiters and storeclerks.

10 **friend**: a citizen an officer knows/recognizes from his/her personal life (this includes family members).

11 **occupational acquaintance**: a citizen an officer speaks to in the course of his/her police role (stopping and talking to juveniles on the street corner about non-crime related topics).
Appendix V

Zero-Order Correlations for Correlates of Officer Use of Formal Authority
<table>
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</table>

Table 1: Bivariate Correlations and $R^2$ Values for Individual-Level Correlates

- Cells include Pearson Correlation. $R^2$ values represent column variable regressed on the remaining independent variables.
- $p < 0.05$; ** $p < 0.01$; $n = 144$
Table 2: Bivariate Correlations and \( R^2 \) s for Situational-Level Correlates

<table>
<thead>
<tr>
<th>Correlate</th>
<th>Correlation Coefficient</th>
<th>( R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Authority</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Actions (Number)</td>
<td>0.144</td>
<td>0.235</td>
</tr>
<tr>
<td>Formal Authority (Highest)</td>
<td>0.019</td>
<td>0.062</td>
</tr>
<tr>
<td>Offense Seriousness</td>
<td>0.434</td>
<td>0.188</td>
</tr>
<tr>
<td>Quantity of Evidence</td>
<td>0.388</td>
<td>0.148</td>
</tr>
<tr>
<td>Probable Cause</td>
<td>0.455</td>
<td>0.207</td>
</tr>
<tr>
<td>Citizen Gender</td>
<td>-0.124</td>
<td>0.015</td>
</tr>
<tr>
<td>Citizen Race</td>
<td>0.133</td>
<td>0.019</td>
</tr>
<tr>
<td>Citizen Age</td>
<td>0.080</td>
<td>0.007</td>
</tr>
<tr>
<td>Demeanor</td>
<td>0.229</td>
<td>0.053</td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>0.218</td>
<td>0.048</td>
</tr>
<tr>
<td>Intoxication</td>
<td>0.290</td>
<td>0.085</td>
</tr>
<tr>
<td>Citizen Role</td>
<td>0.000</td>
<td>0.000</td>
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\( p < 0.05; ** p < 0.01; n = 892 \)
Table 2: Bivariate Correlations and R²s for Situational-Level Correlates (Continued)

<table>
<thead>
<tr>
<th>Correlates</th>
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</thead>
<tbody>
<tr>
<td>Citizen Respectability</td>
<td>0.470**</td>
<td>0.393**</td>
<td>0.317**</td>
<td>0.201**</td>
<td>0.279**</td>
<td>-0.209**</td>
<td>0.149**</td>
<td>0.056</td>
<td>0.127**</td>
<td>0.164**</td>
<td>0.263**</td>
<td>0.388**</td>
</tr>
<tr>
<td>Citizen Residency</td>
<td>0.132**</td>
<td>0.215**</td>
<td>0.199**</td>
<td>0.134**</td>
<td>0.210**</td>
<td>-0.114**</td>
<td>-0.018</td>
<td>0.072*</td>
<td>0.034</td>
<td>0.101**</td>
<td>0.007</td>
<td>0.292**</td>
</tr>
<tr>
<td>Citizen Bystanders</td>
<td>-0.063</td>
<td>-0.068*</td>
<td>-0.054</td>
<td>-0.044</td>
<td>-0.054</td>
<td>0.027</td>
<td>0.025</td>
<td>-0.003</td>
<td>0.016</td>
<td>-0.040</td>
<td>0.002</td>
<td>-0.009</td>
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<tr>
<td>Officer/Supervisor Bystanders</td>
<td>0.002</td>
<td>-0.012</td>
<td>0.020</td>
<td>-0.031</td>
<td>0.002</td>
<td>-0.014</td>
<td>0.042</td>
<td>-0.015</td>
<td>0.075*</td>
<td>0.008</td>
<td>0.067*</td>
<td>0.064</td>
</tr>
<tr>
<td>White Officer-White Citizen</td>
<td>-0.090**</td>
<td>-0.072*</td>
<td>-0.068*</td>
<td>-0.056</td>
<td>-0.057</td>
<td>0.040</td>
<td>-0.753**</td>
<td>-0.101**</td>
<td>-0.105**</td>
<td>-0.075*</td>
<td>0.025</td>
<td>-0.090**</td>
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<tr>
<td>White Officer-Black Citizen</td>
<td>0.088**</td>
<td>0.069*</td>
<td>-0.031</td>
<td>0.043</td>
<td>0.017</td>
<td>0.042</td>
<td>0.541**</td>
<td>0.037</td>
<td>0.024</td>
<td>0.028</td>
<td>-0.024</td>
<td>0.054</td>
</tr>
<tr>
<td>Black Officer-Black Citizen</td>
<td>0.047</td>
<td>0.037</td>
<td>0.120**</td>
<td>0.036</td>
<td>0.067*</td>
<td>-0.054</td>
<td>0.552**</td>
<td>0.106**</td>
<td>0.076*</td>
<td>0.050</td>
<td>0.059</td>
<td>0.111**</td>
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<td>Black Officer-White Citizen</td>
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<td>-0.041</td>
<td>-0.028</td>
<td>-0.053</td>
<td>-0.023</td>
<td>-0.426**</td>
<td>-0.081</td>
<td>0.025</td>
<td>-0.024</td>
<td>-0.069*</td>
<td>-0.109**</td>
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R² values represent column variable regressed on the remaining independent variables: * p < 0.05; ** p < 0.01; n = 892

Table 2: Bivariate Correlations and R²s for Situational-Level Correlates (Continued)
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<th></th>
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<td>Citizen Respectability</td>
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<tr>
<td>Officer/Supervisor Bystanders</td>
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<td>0.065</td>
<td>0.682**</td>
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<tr>
<td>White Officer-White Citizen</td>
<td>-0.074**</td>
<td>0.015</td>
<td>-0.027</td>
<td>-0.037</td>
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<tr>
<td>White Officer-Black Citizen</td>
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<td>0.018</td>
<td>-0.021</td>
<td>0.013</td>
<td>-0.408**</td>
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<td>Black Officer-Black Citizen</td>
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<td>-0.231**</td>
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<td>1.000</td>
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</table>

Note: Cells include Pearson Correlation. R² values represent column variable regressed on the remaining independent variables. * p < 0.05; ** p < 0.01; n = 892
Table 3: Bivariate Correlations and R²s for Individual- and Situational-Level Correlates

<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Formal Authority</td>
<td>0.000</td>
<td>0.123</td>
<td><strong>0.106</strong></td>
<td>0.083</td>
<td><strong>0.118</strong></td>
<td>0.078</td>
<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
<td>0.080</td>
</tr>
<tr>
<td>Actions (Number)</td>
<td>0.000</td>
<td>0.123</td>
<td><strong>0.106</strong></td>
<td>0.083</td>
<td><strong>0.118</strong></td>
<td>0.078</td>
<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
<td>0.080</td>
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<td>Actions (Highest)</td>
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<td><strong>0.106</strong></td>
<td>0.083</td>
<td><strong>0.118</strong></td>
<td>0.078</td>
<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
<td>0.080</td>
</tr>
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<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
<td>0.080</td>
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</tr>
<tr>
<td>Officer Race</td>
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<td>0.000</td>
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<td><strong>0.133</strong></td>
<td>0.088</td>
<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
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</tr>
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<td>Officer Assignment</td>
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<td>-0.100</td>
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<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
<td>0.080</td>
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<tr>
<td>Officer Length of Service</td>
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<td>-0.026</td>
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<td><strong>0.133</strong></td>
<td>0.088</td>
<td>0.097</td>
<td><strong>0.111</strong></td>
<td>0.070</td>
<td><strong>0.094</strong></td>
<td>0.063</td>
<td>0.067</td>
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<td>0.466</td>
<td><strong>0.100</strong></td>
<td>0.080</td>
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<td>-0.098</td>
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<td>1.000</td>
<td>0.466</td>
<td><strong>0.100</strong></td>
<td>0.080</td>
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<tr>
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<td>-0.089</td>
<td>-0.032</td>
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<td><strong>0.100</strong></td>
<td>0.080</td>
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<tr>
<td>Citizen Gender</td>
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<td>0.063</td>
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<td>0.032</td>
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<td>-0.009</td>
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<tr>
<td>Citizen Age</td>
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<td>0.067</td>
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<td>0.063</td>
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<td>0.183</td>
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<td>1.000</td>
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</table>

*a: Cells include Pearson Correlation. R² values represent column variable regressed on the remaining independent variables. * p < 0.05; ** p < 0.01; n = 892*
Table 3: Bivariate Correlations and R² s for Individual- and Situational-Level Correlates (Continued)

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<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demeanor</td>
<td>0.229**</td>
<td>0.161**</td>
<td>-0.025</td>
<td>0.081*</td>
<td>0.029</td>
<td>-0.022</td>
<td>-0.015</td>
<td>0.157**</td>
<td>0.196**</td>
<td>0.228**</td>
<td>-0.086*</td>
<td>0.086**</td>
<td>0.071*</td>
</tr>
<tr>
<td>In-presence Crime</td>
<td>0.218**</td>
<td>0.207**</td>
<td>-0.022</td>
<td>0.049</td>
<td>0.119**</td>
<td>-0.008</td>
<td>-0.042</td>
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<td>0.235**</td>
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<td>-0.113**</td>
<td>0.066</td>
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<td>Intoxication</td>
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<td>-0.023</td>
<td>0.045</td>
<td>0.152**</td>
<td>0.166**</td>
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<td>0.552**</td>
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</tr>
<tr>
<td>Citizen Respectability</td>
<td>0.470**</td>
<td>0.393**</td>
<td>-0.068*</td>
<td>0.035</td>
<td>0.000</td>
<td>-0.077*</td>
<td>0.014</td>
<td>0.317**</td>
<td>0.201**</td>
<td>0.279**</td>
<td>-0.209**</td>
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<tr>
<td>Citizen Residency</td>
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<td>0.215**</td>
<td>-0.001</td>
<td>-0.029</td>
<td>-0.096**</td>
<td>-0.100**</td>
<td>0.025</td>
<td>0.199**</td>
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<td>0.210**</td>
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</tr>
<tr>
<td>Citizen Bystanders</td>
<td>-0.063</td>
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<td>-0.063</td>
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<td>0.020</td>
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<td>-0.014</td>
<td>0.042</td>
<td>-0.015</td>
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<td>-0.057</td>
<td>0.040</td>
<td>-0.753**</td>
<td>-0.101**</td>
</tr>
<tr>
<td>White Officer-Black Citizen</td>
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<td>-0.520**</td>
<td>-0.205**</td>
<td>-0.142**</td>
<td>0.115**</td>
<td>-0.031</td>
<td>0.043</td>
<td>0.017</td>
<td>0.042</td>
<td>0.541**</td>
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<td>0.120**</td>
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<td>0.067</td>
<td>-0.054</td>
<td>0.552**</td>
<td>0.106**</td>
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<tr>
<td>Black Officer-White Citizen</td>
<td>-0.062</td>
<td>-0.052</td>
<td>-0.036</td>
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<td>-0.033</td>
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<td>-0.041</td>
<td>-0.028</td>
<td>-0.053</td>
<td>-0.023</td>
<td>-0.426**</td>
<td>-0.081*</td>
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</table>

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Table 3: Bivariate Correlations and R² Values for Individual- and Situational-Level Correlates (Continued)

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<thead>
<tr>
<th></th>
<th>0'05</th>
<th>0'03</th>
<th>0'01</th>
<th>0'00</th>
<th>0'10</th>
<th>1'10</th>
<th>1'20</th>
<th>2'00</th>
<th>2'20</th>
<th>2'40</th>
<th>2'60</th>
</tr>
</thead>
<tbody>
<tr>
<td>963</td>
<td>0.61</td>
<td>0.74</td>
<td>0.80</td>
<td>0.82</td>
<td>0.85</td>
<td>0.88</td>
<td>0.89</td>
<td>0.90</td>
<td>0.92</td>
<td>0.94</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Note: Cells include Pearson Correlation. R² values represent column variable regressed on the remaining independent variables. * p < 0.05; ** p < 0.01; n = 892
Table 4: Bivariate Correlations and R²s for Community-Level Correlates

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Authority</td>
<td>0.00</td>
<td>0.928</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actions (Number)</td>
<td>0.00</td>
<td>0.995</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime Rate</td>
<td>0.00</td>
<td>0.024</td>
<td>0.476</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mobility</td>
<td>0.00</td>
<td>0.040</td>
<td>-0.33</td>
<td>-0.13</td>
<td>0.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renter Occupied</td>
<td>0.00</td>
<td>0.041</td>
<td>0.57</td>
<td>-0.51</td>
<td>-0.15</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>0.00</td>
<td>0.040</td>
<td>0.44</td>
<td>-0.19</td>
<td>0.70</td>
<td>0.15</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td>0.00</td>
<td>0.035</td>
<td>0.08</td>
<td>-0.08</td>
<td>0.57</td>
<td>0.15</td>
<td>0.65</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Distress</td>
<td>0.00</td>
<td>0.038</td>
<td>0.04</td>
<td>0.04</td>
<td>0.49</td>
<td>0.15</td>
<td>0.91</td>
<td>0.94</td>
<td></td>
</tr>
</tbody>
</table>

* Cells include Pearson correlation. R² values represent column variable regressed on the remaining independent variables. * p < 0.05; ** p < 0.01; n = 892.
Figure 1 – Histogram of the Distribution of the Dependent Variable (Number of FAS Actions Taken)